

No. 17243

**UNITED STATES OF AMERICA
and
BANGLADESH**

**Agreement relating to agricultural research (with annexes).
Signed at Dacca on 29 March 1976**

**Agreement amending the above-mentioned Agreement.
Signed at Dacca on 15 and 19 April 1976**

Authentic texts: English.

Registered by the United States of America on 24 November 1978.

**ÉTATS-UNIS D'AMÉRIQUE
et
BANGLADESH**

**Accord relatif à la recherche agricole (avec annexes). Signé
à Dacca le 29 mars 1976**

**Accord modifiant l'Accord susmentionné. Signé à Dacca les
15 et 19 avril 1976**

Textes authentiques : anglais.

Enregistrés par les États-Unis d'Amérique le 24 novembre 1978.

PROJECT AGREEMENT¹ BETWEEN THE DEPARTMENT OF STATE, AGENCY FOR INTERNATIONAL DEVELOPMENT (AID), AN AGENCY OF THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AND PLANNING COMMISSION, AN AGENCY OF THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

<p>The above-named Parties hereby mutually agree to carry out a project in accordance with the terms set forth herein and the terms set forth in any annexes attached hereto, as checked below:</p> <p><input checked="" type="checkbox"/> PROJECT DESCRIPTION, ANNEX A <input type="checkbox"/> FOREIGN CURRENCY STANDARD PROVISIONS, ANNEX</p> <p><input checked="" type="checkbox"/> STANDARD PROVISIONS, ANNEX² <input type="checkbox"/> SPECIAL LOAN PROVISIONS, ANNEX</p>		1. Project/Activity No.: 388-0003	
		2. Agreement No.: 388-0003-1	3. <input checked="" type="checkbox"/> Original or Revision No. _____
<p>This Project Agreement is further subject to the terms of the following Agreement between the two Governments, as modified and supplemented:</p> <p><input checked="" type="checkbox"/> GENERAL AGREEMENT FOR TECHNICAL COOPERATION DATE: May 21, 1974³</p> <p><input checked="" type="checkbox"/> ECONOMIC COOPERATION AGREEMENT DATE: May 21, 1974³</p> <p><input checked="" type="checkbox"/> (OTHER) DATE: _____</p>		4. Project/Activity Title: Agricultural Research	
		5. Project Description and Explanation: (See annex A attached)	
		6. AID Appropriation Symbol: 72-11X1023	7. AID Allotment Symbol: 402-50-388-00-69-61
8. AID Financing:			
<input checked="" type="checkbox"/> DOLLARS <input type="checkbox"/> LOCAL CURRENCY	Previous total (A)	Increase (B)	Total to date (D)
(a) Total		1,000,000	1,000,000
(b) Contract services		684,000	684,000
(c) Commodities			
(d) Other costs		316,000	316,000

¹ Came into force on 29 March 1976 by signature.

² Not published herein. For the text of the annex, see United Nations, *Treaty Series*, vol. 1084, p. 111.

³ *Ibid.*, vol. 961, p. 59.

9. Cooperating Agency
Financing—Dollar
Equivalent:

\$1.00 = Tk. 14.5

(a) Total	1,077,000*	2,403,000	3,480,000
(b) Technical and other services			
(c) Commodities			
(d) Other costs	1,077,000*	2,403,000	3,480,000

10. Special Provisions (*use additional continuation sheets, if necessary*):

This Agreement consists of:

- Annex A, Project Description;
- Annex B, Participant Training Plan;
- Annex C, ARI Staffing Pattern;
- Annex D, Waiver 388-0003-1;
- Standard Provisions, Annex.

11. Date of Original Agreement:	12. Date of this Revision:	13. Estimated Final Contribution Date:
14. For the Cooperating Government or Agency: [Signed] Signature: EKRAM HOSSAIN Date: 29/3/76 Title: Joint Secretary	15. For the Agency for International Development: [Signed] Signature: DENNIS J. BRENNAN Date: 3/29/76 Title: Acting Director	

* Reflects pre-project FY 1975 contribution of the Government of Bangladesh.

ANNEX A

I. PROJECT DESCRIPTION

A. Introduction

This FY-1976 Project Agreement (Pro Ag) specifically applies to the U.S. Grant financing portion of a total project to develop the Bangladesh Agricultural Research Institute (ARI). FY-1976 grant funding is identified and subsequent year grant funding is tentatively projected. While this Agreement addresses a total project, the financing of about sixty percent of the activity comes under an Agricultural Research Loan Agreement, and not under this document.

The project is to start in FY-1976 and is designed to continue for three years from date of signing of this document.

B. Project purpose

The purpose of the project is to establish a functioning Bangladesh Government (BDG) supported and staffed research system for food crops other than rice, and cropping systems. This is to be achieved by development of the ARI into a fully staffed and adequately equipped institution which produces research results primarily on high priority non-rice food crops.

While the central thrust of the project is projected at ARI, this project also will support and assist in the growth and development of BDG's recently formed Agricultural Research Council (ARC). The ARC's role in the total research system is to coordinate BDG research activities for quicker and more effective findings and thus to avoid wasteful duplicative efforts and save scarce resources.

By the end of the project ARI is expected to have research results utilizable by farmers of Bangladesh and released to the Agricultural Extension Service for dissemination. The ARC should

be actively pursuing its important role. By the end of the project, the ARI and the ARC should be operating with full BDG staff and those new elements financed by project grant funds (ISSCC, page 157, part III, E) will receive regular BDG budget support following project termination; and functional linkages will have been established with relevant international research centers.

C. *Project goal*

The broader objective toward which this project aims is year-around cropping of non-rice crops through full utilization of land where and when rice farming is not possible or economically feasible.

II. PROGRESS TO DATE

A. *Site Development*

For the past several years, the Ministry of Agriculture has been holding 435 acres of land at Joydevpur, 20 miles north of Dacca, as the site for relocating ARI. The site is contiguous with the 165 acre farm of the Bangladesh Rice Research Institute. Since January 1974, the BDG has provided approximately \$1.0 million from its own resources to develop the ARI headquarters station. It is currently estimated that construction of the building shells for the administration building and the library are 60 percent complete; the plant breeding, entomology, and plant pathology buildings are 75 percent complete; the communications, soil fertility, agricultural economics and agricultural chemistry buildings are 80 percent complete; the horticultural, agricultural engineering, agronomy, plant physiology and plant introduction buildings are 85 percent complete.

B. *Participant training*

Participant training activities are underway, even prior to the completion of this Agreement document that provides funds for training. Financed by USAID Development Services and Training grant funds, 18 participants are in FY-1976 being programmed for 120 man months in third countries in short term training. One participant will be programmed for 36 man months academic training in the U.S.

III. ACTIVITY TARGETS: PROJECT OUTPUTS

A. *Establishment and implementation by ARI of cross disciplinary adaptive research programs (involving both the biological aspects and socio-economic aspects) on agricultural problems facing Bengalee farmers*

ARI will concentrate upon the following crops and problem areas: wheat; pulses/legumes, vegetables, potatoes and oilseeds; and cropping systems (both with rice and on drylands), in that order of priority. Integrated programs for wheat, oilseeds (mustard), pulses and vegetables will be planned, and multiple cropping research programs (in rotation with rice and drylands cropping) will be formulated by December 1976.

ARI will move as rapidly as possible to advanced implementation of research projects. Advanced implementation is defined as a minimum of 12 projects/experiments a year for the particular crop/problem area.

In addition to testing at the main Joydevpur research station, experiments will also be carried out at a minimum of one and a maximum of four major substations. Specific targets by end of project are the release of four varieties of wheat, two varieties of oilseeds, one improved pulse variety and three varieties of vegetables.

B. *Establishment of an agricultural research feedback system between ARI programs and projects, and the field trials conducted on farmers' fields*

ARI will establish an operational system of off-station trials on farmers' fields for field testing of improved varieties in different locations and under different soil and weather conditions. All field data will be fed back to central headquarters for final analysis and determination to release for farmer use.

The target will be five field trials for each major crop group per major substation.

C. *Completion of requisite training of senior ARI staff by 1980*

Under the Research Grant, training will be completed for 9 individuals at the Ph.D. level and 24 will receive 12 months of practical advanced level research and production training such as those courses run by CIMMYT, IRRI and other international agricultural research centers. Research for Ph.D. dissertations will preferably be done in Bangladesh as may be permitted by the regulations of sponsoring universities.

By 1977, the BDG will institute four to six crop workshops a year involving several institutions and agencies.

ARI will cooperate with the Bangladesh Agricultural University (BAU) and the Bangladesh Agricultural Institute (BAI) in developing joint postgraduate and training programs. It is anticipated that a total of 12 fellowships will be awarded to BAU and BAI students who will carry out their thesis research work at ARI.

D. *ARI facilities completed and equipped by December 1977*

The financing of the ARI facilities is under the Agricultural Research Loan Agreement and not under this Project Agreement. Construction of the facilities includes farm site development (drainage, roads, land shaping, etc.), interior fittings for the research and administration complexes, construction of the farm operation complex, staff quarters, farm machinery and equipment facilities.

E. *Establishment of an International Staff Support and Coordination Cell (ISSCC)*

The purpose of establishing the ISSCC is to provide a single administrative unit and system for supporting expatriate technicians in the field of agricultural research. The ISSCC, to be organized as an ARC cell, will administer the technical assistance component of the AID grant. ARC will provide office space for its ISSCC staff. Grant funds will be provided for salaries and support costs during the life of the project.

F. *Coordination capacity of the Bangladesh Agricultural Research Council (ARC) fully established by 1978*

The BDG's Agricultural Research Council was recently set up and is expected to steadily grow and assume added responsibility. By the end of the project this responsibility is expected to include but not be limited to the following functions:

1. Identifying problems, determining priorities and drawing up long-term and short-term research programs in the agricultural sector, within national policy;
2. Scrutinizing and approving research proposals of various institutes and centers, and gaining coordinated programs for implementation;
3. Reviewing and evaluating research work done under Government and autonomous bodies;
4. Evaluating the adequacy of research facilities and their proper utilization as a means to bring about improved quality and output of research results;
5. Supervising the activities of research projects financed by the Council;
6. Evaluating and publishing research results and/or coordinating in this area as well as in the dissemination of relevant information;
7. Preparing and maintaining a master plan for manpower requirements and coordinating international training; and
8. Coordinating external research assistance and maintaining contacts with relevant international research institutions.

IV. INPUTS

U.S. GOVERNMENT

A. *AID Grant*

Grant assistance will be used to finance technical help, participant training, commodities and other costs.

1. *Technical help.* Senior agriculturists:

- a. Research Planning Advisor (ARI/ARC);
- b. Agricultural Production Economist (ARI/ARC);
- c. Production Agronomist (ARI);
- d. Station Development Specialist (ARI).

Junior agriculturists:

- a. Horticulturists (ARI);
- b. Agronomist (ARI);
- c. Agricultural Engineer (ARI).

2. *Participant training.* Grant funds will be provided both for international participant training (participant training schedule, annex B) of ARI staff, for attending international seminars and workshops, and for local programs. Local programs will include Master of Science fellowships for selected Bangladesh Agriculture University graduate students.

3. *Commodities.* Commodities under the grant will provide for furniture and major appliances for expatriate housing, for ISSCC office equipment and furniture, and for ISSCC vehicles for direct support of non-Bengalee technicians.

4. *Other costs.* Grant assistance under this project to ARC will consist of resources required to backstop and support the non-Bengalee technicians through the ISSCC. Associated costs will include the salaries of the ISSCC Bengalee staff, in-country travel and other general support.

Grant funds will also be used to finance an increased level of contracting with BDG institutions (including ARI) capable of conducting agricultural research, including the planning and evaluation of agricultural research programs. A minimum of 40 percent of these funds shall be used for research on crops grown on farmers' fields.

NOTE. The procedures for obligation of funds are outlined in section D, Course of Action.

B. AID loan

The separate loan agreement (providing four million dollars) finances for development including drainage, roads, irrigation, land shaping and leveling as well as equipment and farm machinery facilities for ARI. It covers laboratory equipment, furniture, plumbing and wiring for the research and administrative complex of ARI. The loan will also finance the farm building complex including a warehouse threshing floor, petrol/chemical storehouse, workshop/implement shed, walkways, roads and the field laboratory. Construction of up to 240 residential quarters will be included in the loan at both Joydevpur and Ishurdi.

BANGLADESH GOVERNMENT

1. *Financial contribution.* The BDG's financial contribution consists of the Joydevpur site, construction of the administration building, three laboratory buildings, plus the farm superintendent's office. The BDG will also meet the operating and recurrent costs of ARI, and finance the costs of participant travel from point of origin [to] farthest points served by the Government's National Airline. Total BDG contribution is estimated at \$8.0 million, of which \$1.0 million is the estimated cost of construction at ARI's Joydevpur site (see section V below).

2. *ARI personnel.* The BDG will provide adequate staffing for ARI. The Ministry of Agriculture has approved a comprehensive scheme for ARI reorganization and personnel increases. The basic organizational structure consists of:

- A set of subject matter divisions supplemented by a group of multi-disciplinary regional research and testing stations; and
- A set of program support units designed to provide the necessary services required by the professional staff of the subject matter divisions and regional substations.

Based on the recommendations of the Agricultural Research Conference held in Dacca on October 28–31, 1974, and subsequent recommendations of consultants, the staff of the research

divisions and of the regional stations of ARI subject to budgetary limitations will be reorganized and expanded as shown in annex C.

V. FUNDING REQUIREMENTS

All sources of project financing are listed in this section and summarized as follows:

	(\$000)
AID grant	2,561
AID loan	4,000
BDG contribution	7,993
Total for project	14,554

This Agreement, however, obligates grant funds only, and for FY 1976.

A. Details of grant financing (\$000)

	FY-76 ProAg	5th Q. pro- jected	FY-77 pro- jected	FY-78 pro- jected	Totals pro- jected
a. Technical assistance (technicians and consultants)	465	122	398	343	1,328
b. Local support/other costs (ISSCC salaries and other support)	51	15	51	36	153
c. Commodities (Agr. scientists and ISSCC support)	168	0	0	0	168
d. ARC contract research	125	105	125	20	375
e. Training (local fellowships, attending seminars and workshops, and participant training)	191	105	127	114*	537
Total grant financing	1,000	347	701	513*	2,561
Total obligated this ProAg	1,000				

*Figures include 45 for FY-79 participant completions.

B. Details of loan fund use

	FY-76	FY-77	FY-78	Total
a. Farm site development:				
Drainage, roads, irrigation, land shaping and leveling ..	55,000	53,000	47,000	155,000
Equipment and farm machinery	34,000	23,000	23,000	80,000
Sub-total	89,000	76,000	70,000	235,000
b. Professional fees	50,000	50,000	15,000	115,000
c. Research and admin. complex:				
Laboratory equipment	200,000	200,000	300,000	700,000
Furniture	50,000	50,000	—	100,000
Plumbing and electric wiring	200,000	—	—	200,000
Sub-total	450,000	250,000	300,000	1,000,000
d. Farm building complex:				
Godown	50,000	—	—	50,000
Threshing floor	—	10,000	—	10,000
Petrol and chemical store	—	—	15,000	15,000
Workshop-implement shed	—	30,000	—	30,000
Walkways and roads	—	15,000	—	15,000
Field laboratory	—	30,000	—	30,000
Sub-total	50,000	85,000	15,000	150,000
e. Residential quarters:				
Group A				
— Joydevpur	171,500	—	—	171,500
— Ishurdi	17,150	—	—	17,150

	FY-76	FY-77	FY-78	Total
Group B				
— Joydevpur	571,500	357,250	—	928,750
— Ishurdi	80,010	100,030	—	180,040
Group C				
— Joydevpur	171,600	214,400	133,900	519,900
— Ishurdi	85,800	53,600	66,950	206,350
Group D				
— Joydevpur	154,500	64,300	80,300	299,100
— Ishurdi	51,500	32,150	40,150	123,800
Jute plastic				
— Joydevpur	33,410	—	—	33,410
— Ishurdi	20,000	—	—	20,000
Sub-total	1,356,970	821,730	321,300	2,500,000
TOTAL	1,995,970	1,282,730	721,300	4,000,000

C. BDG contribution (taka listed in \$ equivalent) (\$000)

	FY-76	FY-77	FY-78
a. ARI			
Operating budget	1,200	1,320	1,450
Capital budget	448		
Travel	8	10	8
Special programs	443	487	535
<i>Details of first year</i>	<i>1st yr.</i>	<i>2nd yr.*</i>	<i>3rd yr.*</i>
Accelerated oilseeds	(22)		
Wheat improvement	(35)		
Plant introduction program and cash	(202)		
Horticulture	(43)		
Strengthening of soil fertility and testing institute	(11)		
Production breeder seed (wheat)	(30)		
Potato	(100)		
b. ARC			
Operating budget	54	60	66
Grant to research and project contingencies	250	275	302
Total BDG costs	2,403	2,152	2,361
including FY-75 (1077)		7,993	

NOTE. ARI project costs in FY-75 were (1,077) 352 for construction and 725 for land compensation.

*Detail for these years will be included in the Project Assessments for these years.

VI. COURSE OF ACTION

A. Conditions and covenants

Prior to the disbursement of grant funds under this project agreement, the following conditions and covenants shall be met:

1. Conditions precedent to initial disbursement from AID grant funds:
 - a. Autonomy of ARI established.
 - b. Designation of its representative by BDG and ARC.
 - c. Evidence of establishment of a budgetary allocation for ARC for Bangladesh Fiscal Year 1975/76.
 - d. Contract with an organization or firm to provide the basic research and training support to ARC and through ARC to ARI.
 - e. Evidence of Government confirmation of broadened ARC coordinating authority and role among the Bangladesh agricultural institutes.

2. Covenants (under both Loan and Technical Assistance Project).

a. The BDG shall cause ARC and ARI to carry out the project with diligence and efficiency, and in conformity with sound administrative, financial and agricultural practices, and shall not take or permit any action which would interfere with the effective implementation of the project.

b. The BDG shall make available or cause to be made available to ARC and ARI promptly as needed the land, funds, facilities, services, personnel and other resources which are required, in addition to the proceeds of the Grant and Loan, for the carrying out of the project.

c. The BDG and USAID shall cooperate fully to assure that the project will be accomplished as mutually planned.

d. The BDG shall cause ARC and ARI to provide qualified and experienced management for the project and cause ARC and ARI to train such staff as may be appropriate for the maintenance and operation of the project.

e. The BDG shall cause ARC and ARI to operate the project in such manner as to insure the continuing and successful achievement of the project purpose.

f. AID Grant funds shall not be used to pay taxes, duties or similar charges. With respect to tax and customs duty exemptions, the provisions of the Bilateral Agreement (Economic, Technical and Related Assistance Agreement between the Government of the People's Republic of Bangladesh and the United States of America, dated May 21, 1974) shall apply. In addition, the BDG agrees to exempt project commodities from demurrage and storage charges, or in the alternative, to pay promptly such charges.

3. Terminal dates for conditions precedent. The terminal date for meeting conditions precedent, if all of the conditions specified in para. VI,A,1, above shall not have been met within 120 days from the date of this Agreement, or such later date as AID may agree to in writing, AID, at its option, may terminate this Agreement by giving written notice to the BDG.

B. Responsibilities of the contractors

The BDG shall enter into contracts as listed below to provide services in the implementation of this project. The contract documents will outline in detail the objectives, understanding, relationships, operating procedures and finance, as related to the contractors and the BDG and between the contractors. The contracting procedures will conform with *AID handbook II*, Country Contracting, chapter 1.

1. *Contractor #1 (the prime contractor)*. Contractor #1 will be an American university or an international research organization. In general, contractor #1, cooperating and consulting with ARC and ARI, will manage project grant and loan funds, being responsible for:

- a. Providing four senior agriculturists one of which will be Chief of Party;
- b. Establishment and development of the ISSCC as an arm of the ARC;
- c. Providing local support for contractor #2 personnel;
- d. Providing consultant services on a TDY basis;
- e. Procurement of support commodities for the agriculturists and the ISSCC under the Grant, and for the ARI under the Loan; and
- f. Providing for contract research, arranged by ARC contracting with ARI and/or other BDG research institutions.

2. *Contractor #2 (the secondary contractor)*. Contractor #2 will be an American voluntary agency. Contractor #2 will be responsible for providing three junior agriculturists.

C. Relationship of the contractors

Contractor #1 coordinating with ARI and ARC will be responsible for:

1. The technical direction and technical supervision of the contractor #2 agriculturists; and
2. Providing for contractor #2 in-country support through the ISSCC.

D. *Relationship of the BDG to the contractors*

Through the ARC, ARI and/or other appropriate segment of Government, the BDG will, in collaboration with contractor #1 and contractor #2, be responsible for:

1. Research and other proposals, in line of achieving project purposes;
2. Contracting to complete the ARI facilities;
3. Providing personnel for the ISSCC; and
4. Providing office space for the ISSCC.

E. *Relationship of AID to the contractors*

There is no direct responsibility between AID and the contractors.

F. *Procedures for utilization of funds*

1. *Grant funding.* Grant funds under this Agreement will be made available according to the procedures outlined in Agreement Standard Provisions Annex attached to this Agreement. In general, or as otherwise agreed by the BDG and AID in writing, funding will be managed as follows:

a. *Dollar costs*

- 1) *Participant training.* The costs of international participant training will be handled by USAID through the normal PIO/P mechanism.
- 2) *Seminars and workshops.* Out of country seminars and workshops will be arranged and paid for by the #1 contractor.
- 3) *Commodities.* Commodities will be procured by the #1 contractor on behalf of the BDG by AID's issuance of Letters of Commitment and Special Letters of Credit.
- 4) *Contractor #1 and contractor #2 costs.* Contractor #1 and contractor #2 costs for salaries, travel and other costs will be paid by AID directly to contractors, with the approval of the BDG Representatives.

b. *Taka costs*

Taka costs will be reimbursed to the BDG by USAID. Taka expenditures by the BDG for reimbursement will be based on approved budgets. BDG requests for reimbursement shall be approved by #1 contractor.

2. *Loan funding.* Loan funds will be disbursed according to the procedures outlined in the Loan Agreement.

G. *AID right of approvals*

Areas of activity that require AID approval in loan financing are specified in the Loan Agreement. In grant financing under this Agreement, AID (USAID) shall also approve in writing the following:

1. The terms of the contracts that are to be negotiated between the BDG and the Contractors;
2. The Contractors selected by the BDG;
3. ARI and ARC budgets under which BDG reimbursement requests will later be submitted;
4. Proposals for ARC contract research projects; and
5. Attendance at workshops and seminars outside of Bangladesh.

H. *Joint Project Implementation Committee*

A joint Project Implementation Committee will be established to expedite program development. This Committee will function for the Grant as well as for the Loan sections of the AID-financed research project. The major function of this Committee in relation to the Grant is to follow closely the progress of the ISSCC, particularly in regard to procurement of commodities and establishing ISSCC's supporting role.

The Committee will be composed of BDG officials including the Director, Directorate of Research and Education (Ministry of Agriculture), the Executive Vice-Chairman of the Agricultural Research Council and a representative of the Planning Commission, and USAID officials, including representatives of the Agriculture and Capital Development Divisions.

The Committee shall start functioning no later than 60 days after signing of the Project Agreement and shall meet at least once a month.

I. *Monitoring and reporting*

ARI and ARC agree to furnish quarterly progress reports, in English to USAID Bangladesh after the signing of the Project Agreement. Quarterly reports will be due 15 days after quarterly periods ending September 30, December 31, March 31 and June 30.

Contractor #2 agriculturists will provide progress reports as agreed to in writing by the two contractors, the BDG Project Representative and USAID.

Contractor #1 will be required to submit two copies each of a quarterly progress report, due dates same as for ARI and ARC, to USAID and to the BDG Ministry of Agriculture through the ARC. The above reports will be in such form and content as AID may reasonably request.

There will be a quarterly meeting called by ARC to review the quarterly reports. Participants will include, in addition to ARC, the Planning Commission, the ARI, the Contractors and USAID.

ARI will administer the training and make quarterly reports in such form and content as AID may reasonably request.

ARI will report monthly on all construction activities under the project. These reports shall take such form and content as AID may reasonably request.

J. *Evaluation*

An annual evaluation of the Research Project will be conducted starting in October 1976 or as soon thereafter as agreed upon by the BDG and USAID. The purpose of the annual event will be to determine the status of the project in terms of meeting the project purposes. Project purposes evaluated will not be limited to but will include the major areas of:

1. Ongoing cross disciplinary research programs on problems facing Bengali farmers;
2. Communication linkage between sub-stations and farmers established for feedback;
3. Requisite training of senior staff;
4. Coordination capacity of ARC established;
5. ISSCC established; and
6. ARI facilities constructed and equipped.

The annual evaluation will be conducted according to the guide lines established by AID Manual Order number 1026.1. Participants will include the BDG (ARI, ARC and the Planning Commission), other organizations that will contribute or benefit, the Contractors and USAID.

Upon or after completion of final disbursement under the project, a final evaluation will be conducted to assess overall achievement of project purpose. This *ex post facto* evaluation will be conducted in the same manner as the annual evaluations described above.

K. *The period of the Agreement*

This Agreement may be modified, altered or amended by mutual consent of the Parties in writing at any time. Unless otherwise agreed to, subject to the availability of AID funds and legislative authority, this Agreement shall continue through the life of the project.

The final contribution date for obligations made under such agreements and amendments thereto shall be three years from date of signing of this Agreement.

ANNEX B
PARTICIPANT TRAINING PROGRAM

<i>Discipline</i>	<i>MM</i>	<i>Crop or specialty</i>	<i>Country</i>	<i>Practical work Institute</i>	<i>Start date</i>	<i>Cost</i>	<i>191 FY-76</i>	<i>105 5th Qtr.</i>	<i>127 FY-77</i>	<i>69 FY-78</i>	<i>45 FY-79</i>
Ph.D. Degree training*											
Agronomy	40	Cropping Systems	U.S.	ICRISAT		35,000	10,000	2,000	12,000	6,000	5,000
Plant Breeding	40	Pulses	U.S.	ICRISAT		35,000	10,000	2,000	12,000	6,000	5,000
Soil Science	40	Fertility & Management	U.S.	ICRISAT		35,000	10,000	2,000	12,000	6,000	5,000
Plant Pathology	40	Field Crops	U.S.	CIMMYT		35,000	10,000	2,000	12,000	6,000	5,000
Entomology	40	Economic	U.S.	ICRISAT		35,000	10,000	3,000	12,000	5,000	5,000
Horticulture	40	Fruit Prod.	U.S.	U.P.		35,000	10,000	3,000	12,000	5,000	5,000
Agr. Economics	40	Prod. Econ.	U.S.	ICRISAT		35,000	10,000	3,000	12,000	5,000	5,000
Agr. Engineering	40	Tillage & Water Mgt.	U.S.	IRRI		35,000	10,000	3,000	12,000	5,000	5,000
Plant Breeding	40	Cereals	U.S.	CIMMYT		<u>35,000</u>	<u>10,000</u>	<u>3,000</u>	<u>12,000</u>	<u>5,000</u>	<u>5,000</u>
						<u>315,000</u>	<u>90,000</u>	<u>23,000</u>	<u>108,000</u>	<u>49,000</u>	<u>45,000</u>
Career Development Training											
Agronomy	12	Veg. Production	Philippines	AVRDC	6/76	7,000	7,000				
Breeding	12	Veg. Production	Philippines	AVRDC	6/76	7,000	7,000				
Agronomy, Soils	12	Veg. Production	Philippines	AVRDC	6/76	7,000	7,000				
Agronomy	12	Field Crop Prod.	Mexico	CIMMYT	7/76	10,000	10,000				
Agronomy	12	Field Crop Prod.	Mexico	CIMMYT	7/76	10,000	10,000				
Agronomy	12	Field Crop Prod.	Mexico	CIMMYT	9/76	10,000	—	10,000			
Breeding	12	Field Crop Prod.	Mexico	CIMMYT	9/76	10,000	—	10,000			
Agronomy	12	Field Crop Prod.	India	ICRISAT	6/76	5,000	5,000	—			
Agronomy	12	Field Crop Prod.	India	ICRISAT	6/76	5,000	5,000	—			
Breeding	12	Field Crop Prod.	India	ICRISAT	7/76	5,000	—	5,000			
Breeding	12	Field Crop Prod.	India	ICRISAT	7/76	5,000	—	5,000			
Agronomy	12	Pulse Prod.	India	ICRISAT	6/76	5,000	5,000	—			
Agronomy	12	Pulse Prod.	India	ICRISAT	7/76	5,000	—	5,000			
Breeding	12	Pulse Prod.	India	ICRISAT	7/76	5,000	—	5,000			
Agronomy	12	Tillage & Water Mgt.	India	ICRISAT	6/76	5,000	5,000	—			
Agronomy	12	Tillage & Water Mgt.	India	ICRISAT	9/76	5,000	—	5,000			
Economics	12	Production Econ.	India	ICRISAT	9/76	5,000	—	5,000			
Economics	12	Production Econ.	India	ICRISAT	9/76	5,000	—	5,000			
Horticulture	12	Fruit Prod.	Philippines	U.P.	5/76	7,000	7,000	—			
Horticulture	12	Fruit Prod.	Philippines	U.P.	5/76	7,000	—	7,000			
Research Admin. & Mgt.	12		Philippines	U.P. & IRRI	5/76	8,000	8,000	—			

Research Admin. & Mgt.	12	Mexico	CIMMYT	9/76	10,000	—	10,000			
Research Farm Dev. & Mgt.	12	India	ICRISAT	5/76	5,000	5,000	—			
Agr. Engineering . . .	12	Philippines	IRRI	6/76	7,000	7,000	—			
					<u>160,000</u>	<u>88,000</u>	<u>72,000</u>			
Workshops and seminars		Others			<u>50,000</u>	<u>10,000</u>	<u>10,000</u>	<u>15,000</u>	<u>15,000</u>	<u>—</u>
Incountry fellowships		Bangladesh			<u>12,000</u>	<u>3,000</u>	<u>—</u>	<u>4,000</u>	<u>5,000</u>	<u>—</u>
Totals for training					<u>537,000</u>	<u>191,000</u>	<u>105,000</u>	<u>127,000</u>	<u>69,000</u>	<u>45,000</u>

*All academic training for Ph.D.'s will be conducted at U.S. universities. Thesis and practical experience will be obtained from the International Research Institutes or universities listed above if the particular institutes are capable of providing the necessary facilities at the needed time.

ANNEX C

ARI STAFFING PATTERN

1. *Plant Breeding Division*

	Existing	1978
Head of Division	—	1
Stenographer	—	1
Typist	—	1
Peon	—	1

(a) *Economic Botany (Cereals) Section*

	Existing	1978
Principal Officer	2	2
Senior Scientific Officer	4	4
Scientific Officer	8	6
Steno-Typist	1	2
Field Ass't and Others	24	6
Typist	2	2
Lab. Attendant	8	3
Peon	18	4

(b) *Economic Botany (Pulses and Oilseeds)*

Principal Officer	1	1
Senior Scientific Officer	5	2
Scientific Officer	5	7
Steno-Typist	1	1
Field Ass't and Others	20	8
Typist	—	1
Lab. Attendant and Others	5	2
Peon	6	3

(c) *Economic Botany (Minor Fibres and Tobacco) Section*

Principal Officer	1	1
Senior Scientific Officer	4	2
Scientific Officer	7	4
Steno-Typist	1	1
Field Ass't and Others	16	5
Typist	—	1
Lab. Attendant and Others	4	2
Peon and Others	8	2

(d) *Economic Botany (Cotton) Section*

Principal Officer	1	1
Senior Scientific Officer	1	1
Scientific Officer	4	2
Steno-Typist	2	1
Field Ass't and Others	13	4
Typist	—	1
Lab. Attendant and Others	6	3
Peon and Others	5	2

(e) *Plant Introduction Section*

	Existing	1978
Principal Officer	1	1
Senior Scientific Officer	1	1
Scientific Officer	1	1
Field Ass't and Others	3	2
Steno-Typist	1	1
Typist	1	1
Mali	2	2

(f) *Feed and Fodder Crops Section*

Senior Scientific Officer	—	1
Scientific Officer	—	1
Field Assistant	—	2
Typist	—	1
Lab. Attendant	—	2
Peon	—	2

2. *Agronomy Division*

	Existing	1978
Head of Division	—	1
Steno-Typist	—	1
Typist	—	1
Peon	—	1

(a) *Crop Management Section*

Principal Officer	1	1
Senior Scientific Officer	4	3
Scientific Officer	6	6
Steno-Typist	1	1
Field Ass't and Others	31	10
Lab. Attendant	1	4
Typist	—	1
Peon and Others	18	3

(b) *Multiple Cropping Section*

Principal Officer	—	1
Senior Scientific Officer	—	2
Scientific Officer	—	4
Steno-Typist	—	1
Field Assistant	—	6
Lab. Assistant	—	2
Peon	—	2

3. *Soil Science Division*

	Existing	1978
Head of Division	—	1
Stenographer	—	1
Typist	—	1
Peon	—	1

(a) *Agriculture Chemistry Section*

	Existing	1978
Principal Officer	1	1
Senior Scientific Officer	5	5
Scientific Officer	15	10
Steno-Typist	1	1
Field Ass't and Others	19	4
Lab. Attendant and Others	7	5
Typist	—	1
Peon and Others	13	2

(b) *Microbiology Section*

	Existing	1978
Senior Scientific Officer	1	1
Scientific Officer	2	2
Field Assistant	4	4
Typist	1	1
Lab. Attendant	2	2
Peon	1	1

(c) *Plant Physiology Section*

Principal Officer	1
Senior Scientific Officer	2
Scientific Officer	2
Steno-Typist	1
Field Assistant	4
Typist	1
Peon	2

(d) *Soil Physics Section*

Principal Officer	1
Senior Scientific Officer	1
Scientific Officer	2
Field Assistant	4
Lab. Attendant	2
Typist	1
Peon	1

4. *Agriculture Engineering Division*

	Existing	1978
Head of Division	1	1
Stenographer	1	1
Typist	1	1
Peon	1	1

(a) *Engineering Section*

	Existing	1978
Principal Sc. Officer (Agric. Engineer)	1	1
Senior Sc. Officer (Agric. Engineer)	1	2
Scientific Officer (Agric. Engineer)	1	2
Draftsman	2	1
Stenographer	2	1
Tracer	1	1
Senior Fitter	15	1
L.D.A.	1	1
Typist	1	1
Store Keeper	1	1

	Existing	1978
Preparer	1	1
Fitter Helper	16	2
Chairman	2	2
Peon	2	2
Electrician	1	1
Welder	1	1
Foreman	1	1
Moulder	1	1
Hammerman and Others	21	21

(b) *Workshop and Maintenance Section*

	Existing	1978
Senior Scientific Officer (Agric. Engineer)	1	1
Scientific Officer (Agric. Engineer)	1	1
Steno-Typist	1	1
Ass't Sci. Officer	1	1
Estimator	1	1
Senior Fitter	1	1
Foreman	1	1
Typist	1	1
Store Keeper	1	1
Electrician	1	1
Blacksmith	1	1
Welder	2	2
Tinsmith	1	1
Moulder	1	1
Turner	1	1
Latheman	1	1
Furnaceman	1	1
Head Mechanic	1	1
Junior Fitter	1	1
Mechanic	1	1
Painter	2	2
Carpenter	2	2
Fitter Helper	2	2
Peon	2	2
Moulder Helper	2	2
Hammerman	2	2

5. *Horticulture Division*

	Existing	1978
Head of Division	1	1
Stenographer	1	1
Typist	1	1
Peon	1	1

(a) *Fruit Section*

	Existing	1978
Principal Sci. Officer	1	1
Senior Sci. Officer	3	3
Scientific Officer	4	6
Steno-Typist	1	1
Field Ass't and Others	12	8
Typist	—	1
Lab. Attendant	—	2
Mali	34	10
Peon	—	2

(b) *Vegetable Section*

	Existing	1978
Principal Sci. Officer	—	1
Senior Sci. Officer	1	2
Scientific Officer	2	2
Steno-Typist	1	1
Field Ass't and Others	5	4
Typist	—	1
Lab. Attendant	2	2
Peon	2	2

(c) *Technology Section*

	1978
Senior Sci. Officer	1
Scientific Officer	2
Typist	1
Lab. Attendant	4
Peon	1

6. *Agriculture Economics Division*

	1978
Head of Division	1
Stenographer	1
Typist	1
Peon	1

(a) *Production Economics and Farm Management Section*

Principal Officer	1
Senior Scientific Officer	2
Scientific Officer	4
Steno-Typist	1
Field Assistant	4
Peon	1

(b) *Marketing Research Section*

Senior Scientific Officer	1
Scientific Officer	2
Surveyor	10
Computer	2
Typist	1
Peon	2

7. *Plant Pathology Division*

	Existing	1978
Head of Division	—	1
Principal Sci. Officer	1	1
Senior Scientific Officer	5	3
Scientific Officer	9	10
Steno-Typist	1	1
Typist	—	1
Field Assistant and Others	13	10
Lab. Attendant	2	2
Peon and Others	9	3

8. *Entomology Division*

	1978
Head of Division	1
Stenographer	1
Typist	1
Peon	1

(a) *Entomology Section*

	Existing	1978
Principal Officer	1	1
Senior Sci. Officer	4	4
Scientific Officer	4	4
Steno-Typist	1	1
Field Assistant and Others	13	8
Typist	—	1
Peon and Others	5	3
Lab. Attendant	2	2

(b) *Pesticide Materials Section*

	1978
Senior Scientific Officer	1
Scientific Officer	2
Field Assistant	2
Typist	1
Lab. Technician	4
Lab. Attendant	4
Peon	2

9. *Regional Research Stations*(a) *Ishurdi Regional Station*
(200 acres)

	Existing	1978
Production Specialist (P.S.O.)	—	1
Senior Scientific Officer	3	8
Scientific Officer	7	8
Farm Superintendent (S.O.)	1	1
Field Ass't. and Others	20	6
Tractor Driver		2
Tiller Driver and Pump Operator ...		2
Vehicle Driver		1
Steno-Typist		1
Accountant		1
Head Clerk		1
Typist		1
Mechanic		1
Store Keeper		1
Lab. Attendant and Others	7	3
Tractor Driver Asst.		2
Watchman		4
Peon and Others	12	4
Sweeper		2

(b) *Jamalpur Regional Station*
(213 acres)

Production Specialist (P.S.O.)	—	1
Senior Scientific Officer	1	8
Scientific Officer	6	8
Farm Supdt. (S.O.)	1	1
Field Ass't. and Others	13	12

Existing 1978		Existing 1978	
Tractor Driver	2	Tractor Mate	2
Tiller Driver	2	Watchman	4
Vehicle Driver	2	Sweeper	2
Pump Operator	1	Cattle Keeper	2
Steno-Typist	1	Peon	2
Accountant	1	Mali	2
Head Clerk	1		
Typist	1		
Mechanic	1		
Store Keeper	1		
Lab. Attendant and Others	6 3		
Tractor Driver Asst.	2		
Watchman	4		
Peon	12 4		
Sweeper	2		
(c) Hathazari Regional Station (122 acres)		(d) Jessore Regional Station (100 acres)	
Production Specialist (P.S.O.)	— 1	Production Specialist (P.S.O.)	— 1
Senior Sci. Officer	1 6	Senior Sci. Officer	1 5
Scientific Officer	2 6	Scientific Officer	3 5
Field Ass't. and Others	11 4	Farm Supdt. (S.O.)	1 1
Tractor Driver	2	Field Ass't. and Others	10 5
Tiller Driver and Pump Operator ...	2	Tractor Driver	2
Vehicle Driver	2	Tiller Driver	2
Steno-Typist	1	Vehicle Driver	2
Accountant	1	Pump Driver	2
Head Clerk	1	Steno-Typist	1
Typist	1	Accountant	1
Mechanic	1	Head Clerk	1
Store Keeper	1	Typist	1
Lab. Attendant	3	Mechanic	1
		Store Keeper	1
		Lab. Attendant	3
		Tractor Mate	2
		Watchman	4
		Sweeper	2
		Cattle Keeper	2
		Peon	2
		Mali	2

ANNEX D

WAIVER 388-0003-1

Project Agreement No. 388-0003-1, Agricultural Research

March 29, 1967

The subject Agreement has been executed with substantive elements of the project having been defined and agreed to by both Governments. Final details for the nomination and selection of participants to be trained under the project have not as yet been completed.

I therefore waive the requirement to subobligate funds for participants under this Agreement and extend the issuance date for PIO/Ps to June 30, 1976.

[Signed]
DENNIS J. BRENNAN
Acting Director
USAID/Bangladesh

PROJECT AGREEMENT¹ BETWEEN THE DEPARTMENT OF STATE,
AGENCY FOR INTERNATIONAL DEVELOPMENT (AID), AN
AGENCY OF THE GOVERNMENT OF THE UNITED STATES OF
AMERICA, AND PLANNING COMMISSION, AN AGENCY OF THE
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

The above-named Parties hereby mutually agree to carry out a project in accordance with the terms set forth herein and the terms set forth in any annexes attached hereto, as checked below: <input type="checkbox"/> PROJECT DESCRIPTION, ANNEX A <input type="checkbox"/> FOREIGN CURRENCY STANDARD PROVISIONS, ANNEX <input type="checkbox"/> STANDARD PROVISIONS, ANNEX <input type="checkbox"/> SPECIAL LOAN PROVISIONS, ANNEX		1. Project/Activity No.: 388-0003																																				
		2. Agreement No.: 338-0003-1	3. <input type="checkbox"/> Original or Revision No. 1 _____																																			
This Project Agreement is further subject to the terms of the following Agreement between the two Governments, as modified and supplemented: <input type="checkbox"/> GENERAL AGREEMENT FOR TECHNICAL COOPERATION DATE: <input type="checkbox"/> ECONOMIC COOPERATION AGREEMENT DATE: <input type="checkbox"/> (OTHER) DATE:		4. Project/Activity Title: Agricultural Research																																				
		5. Project Description and Explanation: (See annex A attached)																																				
		6. AID Appropriation Symbol: 72-11X1023	7. AID Allotment Symbol: 402-50-388-00-69-61																																			
8. AID Financing: <table border="1"> <thead> <tr> <th></th> <th>Previous total (A)</th> <th>Increase (B)</th> <th>Decrease (C)</th> <th>Total to date (D)</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> DOLLARS</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> LOCAL CURRENCY</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(a) Total</td> <td></td> <td>1,000,000</td> <td></td> <td>1,000,000</td> </tr> <tr> <td>(b) Contract services</td> <td></td> <td>684,000</td> <td></td> <td>684,000</td> </tr> <tr> <td>(c) Commodities</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(d) Other costs</td> <td></td> <td>316,000</td> <td></td> <td>316,000</td> </tr> </tbody> </table>					Previous total (A)	Increase (B)	Decrease (C)	Total to date (D)	<input type="checkbox"/> DOLLARS					<input type="checkbox"/> LOCAL CURRENCY					(a) Total		1,000,000		1,000,000	(b) Contract services		684,000		684,000	(c) Commodities					(d) Other costs		316,000		316,000
	Previous total (A)	Increase (B)	Decrease (C)	Total to date (D)																																		
<input type="checkbox"/> DOLLARS																																						
<input type="checkbox"/> LOCAL CURRENCY																																						
(a) Total		1,000,000		1,000,000																																		
(b) Contract services		684,000		684,000																																		
(c) Commodities																																						
(d) Other costs		316,000		316,000																																		

¹ Came into force on 19 April 1976 by signature.

9. Cooperating Agency

Financing—Dollar

Equivalent:

\$1.00 =

(a) Total	1,077,000*	2,403,000	3,480,000
(b) Technical and other services			
(c) Commodities			
(d) Other costs	1,077,000*	2,403,000	3,480,000

10. Special Provisions (*use additional continuation sheets, if necessary*):

This revision establishes December 31, 1980, as the estimated final contribution date for the project.

11. Date of Original Agreement: March 29, 1976	12. Date of this Revision: April 14, 1976	13. Estimated Final Contribution Date: December 31, 1980
14. For the Cooperating Government or Agency: [Signed] Signature: EKRAM HOSSAIN Date: 4/19/76 Title: Joint Secretary Min/Planning		15. For the Agency for International Development: [Signed] Signature: JOSEPH S. TONER Date: 4/15/76 Title: Director, USAID/ Bangladesh

* Reflects pre-project FY 1975 contribution of the Government of Bangladesh.