

PD-AAL-046

38

A.I.D. Project Number 482-0005

PROJECT
GRANT AGREEMENT
BETWEEN
THE GOVERNMENT OF THE
SOCIALIST REPUBLIC OF THE UNION OF BURMA
AND
THE GOVERNMENT OF
THE UNITED STATES OF AMERICA
FOR THE
MAIZE AND OILSEEDS PRODUCTION PROJECT

Dated: October 26, 1981

Table of Contents

Project Grant Agreement

	<u>Page</u>
Article 1: The Agreement	1
Article 2: The Project	1
SECTION 2.1 Definition of Project	1
SECTION 2.2 Incremental Nature of Project	1
Article 3: Financing	2
SECTION 3.1 AID Contribution	2
SECTION 3.2 Grantee Contribution	2
SECTION 3.3 Project Assistance Completion Date	2
Article 4: Conditions Precedent to Disbursement	2
SECTION 4.1 First Disbursement	2
SECTION 4.2 Notification	3
SECTION 4.3 Terminal Dates for Conditions Precedent	3
Article 5: Special Covenants	3
SECTION 5.1 Project Evaluation	3
SECTION 5.2 Technical Personnel	3
SECTION 5.3 Fertilizer Application	4
SECTION 5.4 Fertilizer Supply	4
SECTION 5.5 Agriculture Corporation Personnel	4
SECTION 5.6 Commodities	4
SECTION 5.7 Taxes and Duties	4
SECTION 5.8 Monitoring	4
SECTION 5.9 Seed Farms	4
SECTION 5.10 Pumps and Transformers	4
Article 6: Procurement Source	4
SECTION 6.1 Foreign Exchange Costs	4
Article 7: Disbursement	5
SECTION 7.1 Disbursement for Foreign Exchange Costs	5
SECTION 7.2 Other Forms of Disbursement	5
Article 8: Miscellaneous	5
SECTION 8.1 Communications	5
SECTION 8.2 Representatives	6
SECTION 8.3 Standard Provisions Annex	6
Annex One: Amplified Description of the Project	
Annex Two: Project Grant Standard Provisions Annex	

Project Grant Agreement

Dated October 26, 1981

Between

The Government of the Socialist Republic of the Union of Burma
("Grantee")

And

The Government of the United States of America, acting through
the Agency for International Development ("A.I.D.").

Article 1: The Agreement

The purpose of this Agreement is to set out the understandings of the parties named above ("Parties") with respect to the undertaking by the Grantee of the Project described below, and with respect to the financing of the Project by the Parties.

Article 2: The Project

SECTION 2.1 Definition of Project. The Project, which is further described in Annex 1, will consist of increasing production of oilseed crops and maize and fostering the adoption of improved technology and production practices for these crops, by means of technical assistance, improved seeds, fertilizer, agricultural equipment; by training in Burma, the United States and other countries; and by necessary local staff and costs. Annex 1, attached, amplifies the above definition of the Project. Within the limits of the above definition of the Project, elements of the amplified description stated in Annex 1 may be changed by written agreement of the authorized representatives of the Parties named in Section 8.2, without formal amendment of this Agreement.

SECTION 2.2 Incremental Nature of Project.

(a) A.I.D.'s contribution to the Project will be provided in increments as shown in Annex 1, the initial one being made available in accordance with Section 3.1(a) of this Agreement. Subsequent increments will be subject to availability of funds to A.I.D. for this purpose, and to the mutual agreement of the Parties, at the time of a subsequent increment, to proceed.

(b) Within the overall Project Assistance Completion Date stated in this Agreement, A.I.D., based upon consultation with the Grantee, may specify in Project Implementation Letters appropriate time periods for the utilization of funds granted by A.I.D. under an individual increment of assistance.

Article 3: Financing

SECTION 3.1 A.I.D. Contribution. To assist the Grantee to meet the costs of carrying out the Project, A.I.D., pursuant to the Foreign Assistance Act of 1961, as amended, agrees to grant the Grantee under the terms of this Agreement not to exceed Seven Million Five Hundred Thousand United States ("U.S.") Dollars (\$7,500,000) ("Grant" or "Dollar Grant"). The Dollar Grant may be used to finance foreign exchange costs, as defined in Section 6.1, of goods and services required for the Project.

SECTION 3.2 Grantee Contribution.

(a) The Grantee agrees to provide or cause to be provided for the Project all resources, other than the A.I.D. contribution, including well-qualified staff, required to carry out the Project effectively and in a timely manner. Annex 1 provides an estimate of the total resources required to carry out the Project.

(b) The resources provided by the Grantee for the Project will be not less than the equivalent of U.S. \$21,000,000, including costs borne on an "in-kind" basis.

SECTION 3.3 Project Assistance Completion Date.

(a) The "Project Assistance Completion Date" (PACD), which is September 30, 1986, or such other date as the Parties may agree to in writing, is the date by which the Parties estimate that all services financed under the Grant will have been performed and all goods financed under the Grant will have been furnished for the Project as contemplated in this Agreement.

(b) Except as A.I.D. may otherwise agree in writing, A.I.D. will not issue or approve documentation which would authorize disbursement of the Grant for services performed subsequent to the PACD or for goods furnished for the Project, as contemplated in this Agreement, subsequent to the PACD.

(c) Requests for disbursement, accompanied by necessary supporting documentation prescribed in Project Implementation Letters are to be received by A.I.D. or any bank described in Section 7.1 no later than nine (9) months following the PACD, or such other period as A.I.D. agrees to in writing. After such period, A.I.D., giving notice in writing to the Grantee, may at any time or times reduce the amount of the Grant by all or any part thereof for which requests for disbursement, accompanied by necessary supporting documentation prescribed in Project Implementation Letters, were not received before the expiration of said period.

Article 4: Conditions Precedent to Disbursement

SECTION 4.1 First Disbursement. Prior to the first disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which

disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., a statement of the name of the person holding or acting in the office of the Grantee specified in Section 8.2, and of any additional representatives, including at least one who shall be the Project Manager for the Grantee with principal responsibility for carrying out the Project and coordinating actions with A.I.D., together with a specimen signature of each person specified in such statement.

SECTION 4.2 Notification. When A.I.D. has determined that the condition precedent specified in Section 4.1 has been met, it will promptly notify the Grantee.

SECTION 4.3 Terminal Dates for Conditions Precedent. If the condition precedent specified in Section 4.1 has not been met within 90 days from the date of this Agreement, or such later date as A.I.D. may agree to in writing, A.I.D., at its option, may terminate this Agreement by written notice to Grantee.

Article 5: Special Covenants

SECTION 5.1 Project Evaluation. Except as the Parties otherwise agree in writing, the program will include no less than semi-annual consultations between the Parties during the implementation of the Project for the purpose of updating implementation plans and schedules. The evaluation program during implementation of the Project and at one or more points thereafter will provide for:

- (a) evaluation of progress toward attainment of the objectives of the Project;
- (b) identification and evaluation of problem areas or constraints which may inhibit such attainment;
- (c) assessment of how such information may be used to help overcome such problems; and
- (d) evaluation, to the degree feasible, of the overall development impact of the Project.

SECTION 5.2 Technical Personnel. The Grantee agrees to provide personnel required for the implementation of the Project with such entry and exit visas as may be necessary for them to perform their duties, and to issue to them, without delay or charge, in accordance with its regulations, such visas and any requisite work, residence, or other permits or registrations which will enable them to reside and carry out their duties within the territory of Burma until the Project is completed.

SECTION 5.3 Fertilizer Application. Grantee shall establish a field-level monitoring system, satisfactory to A.I.D., to ensure the distribution and application to acreage and crops in Project townships of the total amount of fertilizer contributed to the Project by A.I.D. and Grantee.

SECTION 5.4 Fertilizer Supply. Should lack of time prevent the procurement of the fertilizer financed under the Grant required for a crop year, Grantee will provide its fertilizer contribution referred to in Annex 1, Table 3 to cover Project fertilizer requirements for that year with no decrease in the level of Grant financing for fertilizer.

SECTION 5.5 Agriculture Corporation Personnel. The Grantee shall provide sufficient existing and incremental staff support to accomplish the objectives of the Project, including field-level extension personnel, seed farm personnel, and headquarters and other Project counterpart personnel, all as more fully described in Annex 1.

SECTION 5.6 Commodities. The Grantee agrees to ensure that all commodities financed under the Grant shall be expeditiously cleared and properly stored and distributed for purposes of the Project.

SECTION 5.7 Taxes and Duties. Any and all Burmese taxes, duties, and other fiscal levies relating to the implementation of the Project, or to expatriate personnel, and their families, performing services financed under this Agreement, shall either be exempted from payment or be paid by the Grantee.

SECTION 5.8 Monitoring. Grantee will afford A.I.D. representatives the opportunity at all reasonable times to inspect Project sites and utilization of goods and services financed by the Grant.

SECTION 5.9 Seed Farms. Grantee agrees to make sites available for four seed farms, to design and construct all necessary facilities for such seed farms in a timely manner, and to install and maintain properly all project-financed equipment for such farms, all as more fully described in Annex 1.

SECTION 5.10 Pumps and Transformers. Grantee covenants that electrical pumps, transformers and related electrical equipment financed under the grant will be installed in a timely and satisfactory manner and that adequate electrical power will be made available for the project.

Article 6: Procurement Source

SECTION 6.1 Foreign Exchange Costs. Disbursement pursuant to Section 7.1 will be used exclusively to finance the cost of goods and services required for the Project having their source and origin in the United States (Code 000 of the A.I.D. Geographic Code Book as in effect at the time orders are placed or contracts entered into for such goods or services) ("Foreign Exchange Costs"), except as A.I.D. may otherwise agree in writing, and

except as provided in the Project Grant Standard Provisions Annex, Section C.1(b) with respect to marine insurance.

Article 7: Disbursement

SECTION 7.1 Disbursement for Foreign Exchange Costs.

(a) After satisfaction of conditions precedent, the Grantee may obtain disbursements of funds under the Grant for the Foreign Exchange Costs of goods or services required for the Project in accordance with the terms of this Agreement, by such of the following methods as may be mutually agreed upon:

(1) by transmitting to A.I.D. with necessary supporting documentation as prescribed in Project Implementation Letters, (A) requests for reimbursement for such goods or services, or, (B) requests for A.I.D. to procure commodities or services in Grantee's behalf for the Project; or,

(2) by requesting A.I.D. to issue Letters of Commitment for specified amounts (A) to one or more U.S. banks, satisfactory to A.I.D., committing A.I.D. to reimburse such bank or banks for payments made by them to contractors or suppliers, under Letters of Credit or otherwise, for such goods or services, or (B) directly to one or more contractors or suppliers, committing A.I.D. to pay such contractors or suppliers for such goods or services.

(b) Banking charges incurred by Grantee in connection with Letters of Commitment and Letters of Credit will be financed under the Grant unless Grantee instructs A.I.D. to the contrary. Such other charges as the Parties may agree to may also be financed under the Grant.

SECTION 7.2 Other Forms of Disbursement. Disbursements of the Grant may also be made through such other means as the Parties may agree to in writing.

Article 8: Miscellaneous

SECTION 8.1 Communications. Any notice, request, document, or other communication submitted by either Party to the other under this Agreement will be in writing and will be deemed duly given or sent when delivered to such Party at the following address:

To the Grantee:

Managing Director
Agriculture Corporation
Rangoon

To A.I.D.:

A.I.D. Representative
Embassy of the United States of America
Rangoon

All such communications will be in English, unless the Parties otherwise agree in writing. Other addresses may be substituted for the above upon the giving of notice.

SECTION 8.2 Representatives. For all purposes relevant to this Agreement, the Grantee will be represented by the individual holding or acting in the office of Managing Director, Agriculture Corporation and A.I.D. will be represented by the individual holding or acting in the office of A.I.D. Representative, U.S. Embassy, Rangoon, each of whom, by written notice, may designate additional representatives for all purposes other than exercising the power under Section 2.1 to revise elements of the amplified description in Annex 1. The names of the representatives of the Grantee, with specimen signatures, will be provided to A.I.D., which may accept as duly authorized any instrument signed by such representatives in implementation of this Agreement, until receipt of written notice of revocation of their authority.

SECTION 8.3 Standard Provisions Annex. A "Project Grant Standard Provisions Annex" (Annex 2) is attached to and forms part of this Agreement.

IN WITNESS WHEREOF, the Grantee and the United States of America, each acting through its duly authorized representative, have caused this Agreement to be signed in their names and delivered as of the day and year first above written.

GOVERNMENT OF THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

BY: 

TITLE: Deputy Minister
Ministry of Planning
and Finance

GOVERNMENT OF THE UNITED STATES OF AMERICA

BY: 

TITLE: Ambassador of the
United States of America

A.I.D. Project Number 482-0005

Project Grant Agreement

Annex 1.

MAIZE AND OILSEEDS PRODUCTION PROJECT

Amplified Description of the Project

The purpose of the Maize and Oilseeds Production Project is to increase production of oilseed crops (principally groundnut, sesamum, and sunflower) and maize in an estimated 28 townships of rural Burma, with positive effects on rural income, on national food supply, on nutrition and on the balance of trade.

The Project will apply at least ten means to higher yields and increased production of maize and oilseeds. They are: (1) use of improved higher yielding varieties of seed; (2) proper land preparation; (3) plant density; (4) use of organic manure; (5) use of chemical fertilizers; (6) pest and disease control; (7) sowing techniques; (8) weed control; (9) timely harvesting; and (10) irrigation/water management practices. This will be accomplished through a comprehensive program including technical assistance, training, provision of agricultural machinery and equipment, and fertilizer procurement, as further summarized in this Annex.

Quantitative Goals

The following total production targets in the project area are considered reasonable during the life of the project:

- (1) To increase maize production by 228,000 MT.
- (2) To increase groundnut production by 258,000 MT, of which 87,000 MT will be directly attributable to Project acres included in intensive and extensive townships and an additional 171,000 MT attributable indirectly to other groundnut acreage throughout Burma through the spread of rhizobium inoculation technology.
- (3) To increase sesamum production by 25,000 MT.
- (4) To increase sunflower production by 53,000 MT.
- (5) To increase soybean production by 12,000 MT.
- (6) To increase gross farm income by K1,273 million (\$177.0 million).
- (7) To increase production and possible export of oil cake and related products by K373.0 million (\$52.0 million).

(8) To increase the value and reduce possible imports of edible oil by K499.0 million (\$69.0 million).

(9) To improve nutrition by an increase in availability of edible oil by 30% from approximately 2.8 kg. to 3.8 kg. per capita.

Project Area

The Project will focus on increases in crop production during four crop years in Burma, corresponding to 1982-83, 1983-84, 1984-85, and 1985-86. Estimated total acreage planted to maize, groundnut, sesamum, and sunflower in the 28 townships will reach 388,600 acres by the 1985-86 crop year, as illustrated in Table 1. In addition, by the 1985-86 crop year an estimated 20,000 acres will be planted to soybean, which will be a fifth crop introduced in the Project on a pilot basis.

Table 1 lists the "intensive" and "extensive" townships selected for participation in the Project. Eight (8) intensive townships, identified as having the highest potential for increased agricultural production, will receive concentrated inputs of fertilizer, improved seed and intensified services of extension personnel. Where needed, special emphasis will also be given to irrigation and/or water management. Within each intensive township, there will also be approximately five (5) high technology sites or a total of approximately forty (40) such sites. Each site will have access to about five acres chosen from among participating farm units, or about 200 acres in all eight intensive townships. Extension staff of the Agriculture Corporation, assisted by researchers from the Agricultural Research Institute in Yezin, and with technical guidance from AID experts, will use the high technology sites for on-farm field testing of new technologies, and to analyze benefits, costs and implementation constraints at local levels.

In addition to the intensive townships, twenty (20) extensive townships, identified as also having high potential for maize and oilseeds, will receive lesser amounts of inputs and services. While improved seed will be available for these townships, limits on fertilizer availability will require that the rate of fertilizer application be reduced by approximately one-half on Project acres in the extensive townships. Also, fewer extension personnel, trained specifically in the Project crops, will be available. Nevertheless, these townships are included in the Project and will receive special attention, particularly for first-spread diffusion of proven new technology where resources permit.

Project Outputs

In addition to targeted production increases, the following outputs are expected to be established by the end of the project:

(1) Improved national research capability in maize and oilseeds.

On-going trials will be conducted at central research facilities in Yezin and at the 40 field-level high technology sites within the eight intensive townships on seed varieties, soils, fertilizer application rates, water control and other production variables affecting yields of maize and oilseeds.

(2) Introduction of improved maize and oilseed technology and production practices (seed, water, fertilizer, integrated plant protection). Newly developed technology farm-tested at high technology sites will result in township and/or village specific production packages for each crop.

(3) Four (4) fully-equipped and staffed seed farms. Two foundation seed farms of approximately 70 acres for oilseeds and 110 acres for maize plus two certified seed farms of approximately 800 acres for oilseeds and 3,000 acres for maize will be established by the Project. All four will be operational and will be integrated with seed processing facilities for drying, bagging and storing an estimated 3,500 MT per year of maize, groundnut, sesamum, sunflower and soybean seed. (The locations selected for the seed farms are listed in Table 2.)

(4) An operational farm management information system for monitoring farm-level production practices and providing feedback on results to research and extension centers. A functional data collection and farm management information system will be put in place and will be operated by trained staff in the eight intensive townships.

(5) Returned participant trainees in place within the research, extension, seed farm and fertilizer distribution elements of the Project. After training, it is anticipated that returned Burmese participant trainees will occupy positions directly or indirectly involved with maize and oilseed production.

(6) A functional rhizobium production facility (inoculum for groundnut and soybeans). Local nitrogen-fixing inoculum production of an estimated 3 million pounds per year is planned by year five of the Project, leading to long-term reductions in Burma's requirement for urea fertilizer compared with what those requirements would have been in the absence of this Project.

Project Inputs

Inputs supplied by the Project to carry out the above activities will involve total expenditures of \$51 million, including \$30 million of AID Grant funds, (subject to the availability of funds to AID for the Project and to the mutual agreement of the Parties), \$10 million worth of fertilizer contributions by the Grantee, and K79.2 million (\$11.0 million equivalent) provided by the Grantee for local costs of Project. Major project inputs are as follows:

(1) Technical assistance: Approximately 13 person-years of long-term technical assistance and 50 person-months of short-term consultants.

(2) Training: Approximately 1443 person-months of participant training, based on 11 MS/PhD degrees or 528 person-months; 25 MS degrees or 600 person-months; and 70 short-term, non-degree programs or 315 person-months.

(3) Fertilizer: Approximately 70,000 MT supplied during the life of the Project, with approximately 40,000 MT supplied using AID Grant funds and approximately 30,000 MT using Grantee resources.

(4) Agricultural equipment: Approximately \$5 million of Grant-financed machinery and equipment for seed farms, seed processing facilities, a rhizobium production facility, research equipment for the Agricultural Research Institute at Yezin, water pumps and related equipment, extension demonstration equipment, and costs of procurement.

(5) Local costs: Approximately \$11 million in Grantee-funded costs for Project operations, including necessary existing and incremental personnel assigned to the Agriculture Corporation; support for the Project Team; construction of seed farms, seed processing facilities and the rhizobium inoculum facility; salaries/allowances for participant trainees while overseas, local staff training, and English language training when necessary; and costs of fertilizer transport and distribution from Rangoon to township-level godowns.

Financial Plan

Detailed plans of financial contributions to the Project by AID and the Grantee are included in Tables 4 and 5. These are broken down by Project input and, in the case of the A.I.D. contribution, by the amount obligated in the first year, as well as the amounts anticipated in future years of the Project.

Project Implementation

Administrative Arrangements: The Agriculture Corporation, under its Managing Director, will be directly responsible for the Project and will coordinate as necessary with other Departments and Corporations within the Ministry of Agriculture and Forests as well as other government Ministries.

The organizational structure of the Project is depicted in Table 6. Because the Project calls for a multi-disciplinary team of specialists and counterparts to accomplish objectives involving several divisions within the Agriculture Corporation, the Project Team as described herein will formally report to the Managing Director. However, operational coordination and guidance will be with the General Managers and Deputy General Managers of the principal divisions of the Agriculture Corporation engaged in the Project, which will primarily be the Planning and Projects Division, the Extension Division, the Agricultural Research Institute (located at Yezin), and the Procurement Division.

It is expected that the Project Team will consist of up to six (6) representatives, equally balanced between the Agriculture Corporation and U.S. advisors financed by the Grant. Each side will assign technical specialists to the Project Team who will work in professional counterpart relationships to implement different aspects of the Project. One specialist from each side will be designated as team leader responsible for over-all management and administration of the Project in addition to technical responsibilities.

As part of its local cost contribution to the Project, the Agriculture Corporation will arrange for office space, equipment, support staff, and transportation for the Project Team.

Field-level project implementation will be accomplished via three principal contact points.

First, in each of the townships involved in the Project, the Agriculture Corporation Township Managers (Extension Division) will assign and supervise at least one Project Coordinator and as many additional extension staff as required to carry out the Maize and Oilseeds Production Project in their township. They will be selected based on leadership and technical abilities, particularly in the specific crops chosen for emphasis in each township. Among their key responsibilities will be supervision of research and demonstration activity at high technology sites within the township, monitoring functions concerned with fertilizer use based on the recommended application rate per acre, introduction of other inputs including pest management, machinery and equipment, and rhizobium inoculum (for groundnut), participation in other data collection, and evaluation of results in terms of yield and production increases achieved in each township. (See Table 7).

The second contact point in the project area follows the same channel through Agriculture Corporation Township Managers to seed farm managers at the four Project seed farms. Design, construction, equipment installation and other preparation of the seed farms before they become fully operational, will require frequent visits by Project Team members and other short-term consultants. Moreover, special attention in the Project is given to training and management aspects of seed development.

The third field-level contact point for the Project is the Agricultural Research Institute at Yezin. Project personnel will coordinate as necessary with activities at Yezin, particularly those that relate to strengthening research and extension capabilities, focused on maize and oilseeds.

Technical Assistance: AID will enter into a contract using Grant funds for the provision of necessary technical assistance and training required by the Project, assisting in Project-related procurement of agricultural equipment, and other responsibilities to be detailed in the contractor's scope of work. This will include an average of three long-term experts during an approximately 4 1/2-year period, or approximately 13 person years of long-term technical assistance. In addition, a total of 50 person months of short-term consultants are anticipated for specialized technical services of 1-2 months duration each during the course of the Project. Representatives of the Agriculture Corporation are expected to participate in the selection of the contractor, which will be accomplished in accordance with AID's competitive selection procedures.

Procurement Plan: Agricultural Equipment. All equipment financed under the grant will be procured by AID on behalf of the Grantee in accordance with applicable AID regulations and procedures. This will include approval by the Grantee of final equipment lists and final commodity specifications prior to procurement actions.

Procurement Plan: Fertilizer. Because of the critical timing of fertilizer procurement, AID will on behalf of the Grantee take responsibility for the purchase of the fertilizer. The following procedures will be used for procuring Grant-financed fertilizer during the course of the Project:

- The Grantee will approve fertilizer and bagging specifications before the start of the procurement process;
- AID will take responsibility for the procurement and will tender for the fertilizer on an FOB basis;
- AID will arrange for publication of the advertisement for fertilizer;
- AID will distribute the Invitations for Bid (IFB) through its Office of Commodity Management and issue freight tenders;
- The bid opening will take place in Washington including participation by Grantee representatives;
- The evaluation of offers and coordinating of freight offers with commodity awards will be done by AID;
- Commodity awards will be made by AID, with concurrence of the Grantee;
- Award notices will be issued by AID, on behalf of the Grantee;
- Shipment to Rangoon will be arranged by AID on behalf of the Grantee;
- Payment to the suppliers will be made by AID direct letter of commitment;
- The Grantee will take responsibility for domestic movement of fertilizer from port to township warehouses.

Environmental Assessment

The current use of pesticides in Burma on maize, groundnut, sesamum, sunflower and soybean was thoroughly analyzed during the appraisal of the Project. It has been agreed to continue the use of endrin, aldrin, lindane and DDT on maize and oil crops in the Project area until the local farmers can become familiarized with the new names, physical characteristics, application procedures and efficacy of more environmentally acceptable substitutes, and to initiate a search to identify the most cost effective substitutes for all of the chlorinated hydrocarbons with the goal of phasing out the chlorinated pesticides over a period of two years if possible, but in any event no later than the end of the Project. Responsibility for monitoring and reporting on the phase out of these pesticides will rest with the Agriculture Corporation.

BURMA MAIZE AND OILSEEDS PRODUCTION PROJECT

INTENSIVE AND EXTENSIVE PROJECT TOWNSHIPS, ACREAGE BY CROP

CROP YEARS 82-83, 83-84, 84-85, 85-86

(PROJECT YEARS 2,3,4,5)

Intensive Townships (8)

CROP	TOWNSHIP	DIVISION	ACREAGE (000)				Total
			82-83	83-84	84-85	85-86	
Maize	Zalun	Irrawaddy	12.0	15.0	18.0	20.0	65.0
"	Taze	Sagaing	20.0	25.0	28.0	30.0	103.0
"	Lewe	Mandalay	10.0	15.0	20.0	25.0	70.0
"	Pyinmana	Mandalay	15.0	20.0	25.0	30.0	90.0
Total Maize			57.0	75.0	91.0	105.0	328.0
Groundnut	Daik-U	Pegu	22.5	25.0	27.5	30.0	105.0
"	Yandoom	Irrawaddy	15.0	17.0	19.0	20.0	71.0
Sesamum	Moulmeingyun	Irrawaddy	34.0	36.0	38.0	40.0	148.0
Sunflower	Yamethin	Mandalay	15.0	20.0	25.0	30.0	90.0
Total Oilseed			86.5	98.0	109.5	120.0	414.0
TOTAL Intensive Townships			143.5	173.0	200.5	225.0	742.0

Extensive Townships (20)

CROP	TOWNSHIP	DIVISION	ACREAGE (000)				Total
			82-83	83-84	84-85	85-86	
Maize	Letpadan	Pegu	-	-	-	3.2	3.2
"	Ma-Ubin	Irrawaddy	-	-	-	3.2	3.2
"	Kanbalu	Sagaing	-	9.6	11.2	12.0	32.8
"	Tatkon	Mandalay	-	-	-	6.0	6.0
Total Maize			-	9.6	11.2	42.4	45.2
Groundnut	Kyauktaga	Pegu	3.2	4.0	4.0	4.0	15.2
"	Tatkon	Mandalay	-	-	6.0	6.0	12.0
"	Singu	Mandalay	-	6.8	6.8	6.8	20.4
"	Myaung	Sagaing	-	10.0	10.0	10.0	30.0
"	Magwe	Magwe	30.0	30.0	30.0	30.0	120.0
"	Natmauk	Magwe	-	-	-	14.4	14.4
Total Groundnut			33.2	50.8	56.8	71.2	212.0
Sesamum	Ma-Ubin	Irrawaddy	-	-	6.0	8.0	14.0
"	Kaungmyon	Irrawaddy	-	-	3.2	4.0	7.2
"	Natma	Irrawaddy	12.0	14.0	15.0	16.0	57.0
"	Okpo	Pegu	-	8.0	8.0	8.0	24.0
"	Hensada	Irrawaddy	-	-	3.0	4.0	7.0
"	Nyittha	Mandalay	3.0	4.0	4.0	4.0	15.0
"	Kyaukse	Mandalay	10.0	10.0	10.0	10.0	40.0
Total Sesamum			25.0	36.0	49.2	54.0	164.2
Sunflower	Kyauktaga	Pegu	-	-	5.0	6.0	11.0
"	Budalin	Sagaing	-	-	-	4.0	4.0
"	Pyawbwe	Mandalay	-	2.8	3.6	4.0	10.4
Total Sunflower			-	2.8	8.6	14.0	25.4
TOTAL EXTENSIVE TOWNSHIPS			58.2	99.2	125.8	163.6	446.8
<u>GRAND TOTAL</u>			201.7	272.2	326.3	388.6	1188.8

BEST AVAILABLE DOCUMENT

Table 2

Seed Farm Locations Selected for Project

<u>Seed Farm Type</u>	<u>Processing Plant</u>	<u>Name of Farm</u>	<u>Approx. Acres</u>	<u>Township</u>	<u>Division</u>
Foundation maize	No	Tatkon	100	Tatkon	Mandalay
Certified maize	Yes	Thitco	3000	Natalin	Pegu
Foundation oilseeds	Yes	Meaungkan	70	Yamethin	Mandalay
Certified oilseeds	Yes	Kyaung-su	800	Kyauktaga	Pegu

Table 3

ESTIMATED FERTILIZER REQUIREMENTS BY CROP YEARMT and U.S. \$ (000) (CIF)(ILLUSTRATIVE ONLY)

Crop Type of Fertilizer	1982-83		1983-84		1984-85		1985-86	
	AID	SRUB	AID	SRUB	AID	SRUB	AID	SRUB
UREA (33,500 MT)	7000 MT 2660		9100 MT \$3500		10700 MT \$4100		6700 MT 2546	
	-	\$2660	-	\$3500	10000 \$3800	700 MT \$300	-	\$2546
TSP (30,000 MT)	10000 MT \$3700		10000 MT \$3700		-		10000 MT \$3700	
	\$3700	-	\$3700	-	-	-	\$3700	-
MOP (4,200 MT)	800 MT \$192		1000 MT \$240		1100 MT \$264		1300 MT \$312	
	-	\$192	-	\$240	-	\$264	-	\$312
TOTAL by Year (\$ ONLY)	AID	SRUB	AID	SRUB	AID	SRUB	AID	SRUB
	\$3700	\$2852	\$3700	\$3740	\$3800	\$564	\$3700	\$2858

GRAND TOTAL = AID = \$ 16.8 million

Notes to Table 3:

1. This table is illustrative only, showing estimated requirements (MT) for urea, TSP and MOP on Project acreage in the 28 townships during each of the four crop years. Using the prices stated below in Note #2, when multiplied by the MT requirements used in this illustrative table the total cost of fertilizer would reach \$26.1 million, or an amount in excess of the \$25.0 million planned for the Project. In practice, an ongoing adjustment will need to be made periodically by AID and SRUB representatives to achieve a current balance between the total dollars available (\$25.0 million), the actual CIF prices of international fertilizer procurements, the actual MT of fertilizer supplied to the Project, and thereby the number of Project acres that can be included. As a matter of principle, it is agreed that any adjustment in acreage covered by the Project will be made in the extensive and not the intensive townships.
2. Prices are calculated at \$380/MT for urea, \$370/MT for TSP, and \$240/MT for MOP. These are average international CIF prices including an inflation factor expected for the three types of fertilizer during the four years in which fertilizer will be purchased.
3. Because it is difficult to tender for shipments of fertilizer in amounts of less than 10,000 MT, and because all TSP purchases will be made using grant funds, the preferred schedule of Grant-financed purchases of fertilizer (approximately \$15.0 million) will be as follows:

	(000)
For 1982-83 crop year: 10,000 MT TSP x \$370=	\$3,700
For 1983-84 crop year: 10,000 MT TSP x \$370=	3,700
For 1984-85 crop year: 10,000 MT urea x \$380=	3,800
For 1985-86 crop year: 10,000 MT TSP x \$370=	<u>3,700</u>
Total:	\$14,900

This means that there may be an excess of TSP purchased (30,000 MT) compared to estimated Project requirements (approximately 27,300 MT). The excess TSP procured, if any, will be made up by additional urea purchases by the Grantee against Project requirements.

Table 4

SUMMARY OF PLANNED AID CONTRIBUTION
(ESTIMATE: U.S. \$000)

<u>Project Inputs</u>	<u>Obligated (FY 1982)</u> <u>U.S. \$ (000)</u>	<u>Anticipated (Future)</u> <u>U.S. \$ (000)</u>	<u>Total U.S. \$(000)</u>	<u>% of Grant Total</u>
Technical Assistance <u>1/</u>	500	1,900	2,400	8.0
Participant Training <u>2/</u>	800	2,200	3,000	10.0
Fertilizer <u>3/</u>	3,700	11,300	15,000	50.0
Equipment <u>3/</u>	2,500	2,500	5,000	16.7
Inflation	-	100	100	.3
Inflation & Contingency Reserve <u>4/</u>	-	4,500	4,500	15.0
TOTAL	7,500	22,500	30,000	100.0

- Notes: 1/ Includes first year dollar costs of 15 short-term and 3 long-term Technical Assistance consultants plus a portion of contract overhead.
- 2/ Includes all dollar costs of 8 MS/PhD, and 15 short-term training programs plus a portion of contract overhead.
- 3/ On CIF Rangoon basis. Inflation has been included.
- 4/ Includes \$3,600,000 contingency reserve that may be applied to any line item by mutual agreement, and \$900,000 inflation reserve for Technical Assistance and Training (inflation has been calculated separately for Fertilizer and Equipment in the appropriate line items).

Table 5

SUMMARY OF PLANNED GRANTEE CONTRIBUTION
 (\$'000 equivalent) 1/

<u>Project Inputs</u>	<u>1982/83</u>	<u>Anticipated (Future)</u>	<u>Total</u>	<u>% of Grantee Contribution</u>
<u>Fertilizer 2/</u>	<u>2,852</u>	<u>7,148</u>	<u>10,000</u>	<u>46%</u>
<u>Local costs 3/</u>	<u>3,762</u>	<u>7,974</u>	<u>11,736</u>	<u>54%</u>
Staff Training	180	723	903	4%
Fertilizer Movement	1,638	4,612	6,250	29%
Construction	1,068	1,068	2,136	10%
Equipment and Equipment Movement	662	663	1,325	6%
Office Equipment and Vehicles	114	115	229	1%
Inflation and Contingency Reserve	<u>100</u>	<u>793</u>	<u>893</u>	<u>4%</u>
TOTAL	\$ 6,614	\$15,122	\$21,736	100%

1/ Kyat 7.2 = \$1.0

2/ On CIF basis. Inflation has been included. Considered as foreign exchange contribution to Project.

3/ Equal to Kyat expenditure estimated at K27.0 million in first year and K84.5 million for life of project.

Table 6

Maize and Oilseeds Project Organization

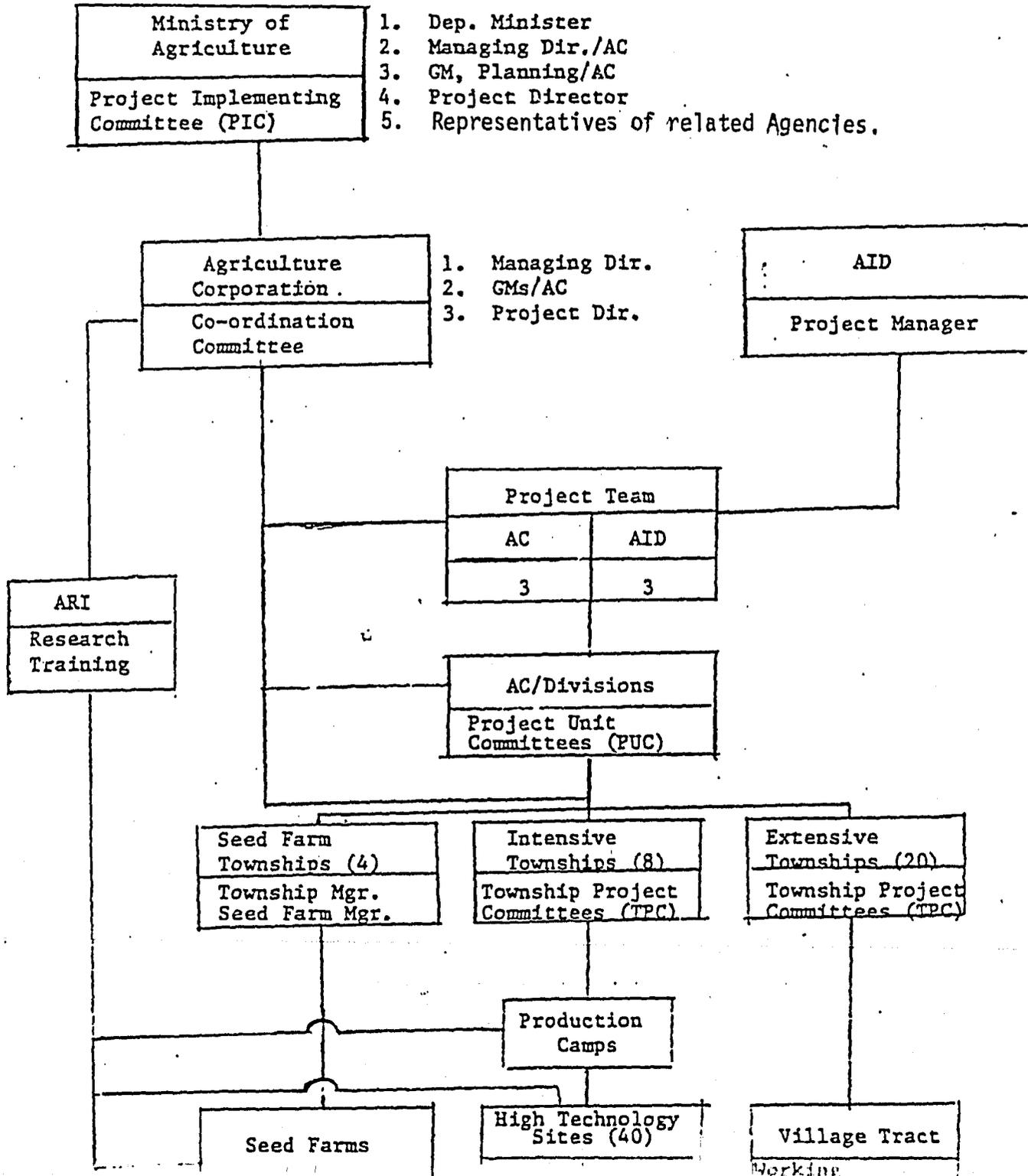


Table 7

AGRICULTURAL CORPORATION: PERSONNEL REQUIRED FOR
PROJECT MANAGEMENT AND IMPLEMENTATION

<u>Position</u>	<u>No. of Personnel</u>
<u>Headquarters</u>	
1. Project Director	1
2. Project Coordinator	3
3. Deputy Project Director (Grade I and Grade II)	7
4. Senior Subject Matter Specialist & Assistant Project Director	8
5. Senior Subject Matter Specialist & Deputy Assistant Project Director	8
6. Office Staff	56
<u>Division/State Level</u>	
7. Assistant General Manager	5
8. Deputy Assistant General Manager	5
9. Office Staff	5
<u>Seed Farms</u>	
10. Farm Manager	7
11. Deputy Farm Manager	6
12. Field and Office Staff	53
<u>Township Level</u>	
13. Township Manager & Subject Matter Specialist	30
14. Deputy Township Manager	28
15. Field & Office Staff	219
	<hr/>
	441
	<hr/>

The operating cost for incremental staff for the project is estimated to