No. 17275

UNITED STATES OF AMERICA and GHANA

Project Agreement relating to agricultural services for small farmer development (with annexes). Signed at Accra on 29 September 1976

Authentic text: English.

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

ÉTATS-UNIS D'AMÉRIQUE et GHANA

Accord portant sur un projet relatif à la fourniture de services agricoles pour le développement des petites exploitations (avec annexes). Signé à Accra le 29 septembre 1976

Texte authentique: anglais.

Enregistré 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 THE MINISTRY OF ECONOMIC PLANNING

| AN AGEN | NCY OF THE GO | OVE | KNME | NT OF GH | ANA | | |
|---|---|----------|---------------------------------------|--|-----------------------------|--|--|
| The above-named Partitually agree to carry out a pance with the terms set fort terms set forth in any and hereto, as checked below: | roject in accord- th herein and the | 1. | Proje Activ No. 6 | | | | |
| DESCRIPTION C ANNEX A S P | URRENCY TANDARD PROVISIONS ANNEX | 2. | | ement 0067-TO-4 | _ | Original or Revision No | |
| | PECIAL LOAN PROVISIONS | | | | | | |
| _ | NNEX | 4. | Proje | ct/Activity | Title | | |
| This Project Agreement is to the terms of the follow between the two governme and supplemented: | wing agreement | | RICUI | aged Input LTURAL SER IER DEVELO | RVICES FOR | | |
| | Date | <u> </u> | | | | | |
| AGREEMENT FOR TECHNICAL COOPERATION | 3 June 1957 ³ | 5. | Project Descripti (See Annex A att | | ion and Explanation tached) | | |
| COOPERATION | Date | | | | | | |
| AGREEMENT (other) | Date | 6. | AID Appropriation Symbol 72-11X1023 | | Syr 402 | ID Allotment ymbol 02-50-641-00- 9-51 | |
| 8. AID Financing | | | | | | | |
| ☐ DOLLARS ☐ L | OCAL CURRENCY | | us total 4) | Increase (B) | Decrease (C) | Total to date (D) | |
| (, , | | | | \$1,800,000 | | \$1,800,000 | |
| , . | | | | 772,000 | | 772,000 | |
| | • | | | 153,000 | | 153,000 | |
| (c) Commodities | | | | 814,000 | 814,000 | | |
| (d) Other Costs | | | | 61,000 | ļ. | 61,000 | |

¹ Came into force on 29 September 1976 by signature.

² Not reproduced herein. For the text, see United Nations, *Treaty Series*, vol. 1084, No. I-16587.

³ United Nations, Treaty Series, vol. 284, p. 63.

| 9. | Coc | perating Agency |
|----|-------|------------------------------|
| | Fina | ancing—Dollar |
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| | \$1.0 | 00 = |
| | (a) | Total |
| | (b) | Technical and other Services |
| | (c) | Commodities |
| | (d) | Other Costs |

10. Special Provisions (Use Additional Continuation Sheets, if Necessary)

This Agreement provides initial authorization and funding for the grant portion of the MIDAS project, as described in Annex A, Annex B (the budget) and the Standard Provisions Annex, all attached hereto.

| 12. Date of | this Revision | 13. Estimated Final Cont bution Date 30 September 1979 | | | | |
|-------------|--|---|--|--|--|--|
| Government | 15. For the Agency for International Development: | | | | | |
| | Signature: IRVIN D. COKER Date: 29/9/76 Title: Director, USAID/Ghana | | | | | |
| | 12. Date of Government ary nomic | Government 15. For the Develor Signature: I Date: 22 ary Title: I | | | | |

For the Government of Ghana:

[Signed]

Col. P. K. NKEGBE

Commissioner of Agriculture

For the United States of America:

[Signed]

JOHN A. LINEHAN
Charge d'Affaires, a.i.

ANNEX A

I. GOAL AND PURPOSE

A. Sector Goal

To increase agricultural production on small holdings, leading to higher levels of income and welfare for small-scale farmers in Ghana.

B. Project Purpose

To develop an institutionalized, coordinated system to provide improved agricultural inputs and services to small-scale farmers on timely basis, particularly in areas served by the Agricultural Development Bank's (ADB) new Farm Loan Offices (FLO).

II. INTRODUCTION

To obtain significant increase in the agricultural production of Ghana's small-scale farmers, the institutions serving farmers will need to improve the quality and quantity of their individual and jointly coordinated efforts to provide agricultural inputs and services on a regular and timely basis to the large numbers of small-scale farmers. These inputs and services are credit, fertilizer, herbicides, pesticides, improved seeds, small farm equipment inputs at the intermediate technology

¹ Not reproduced herein. For the text, see United Nations, Treaty Series, vol. 1084, No. I-16587.

level, marketing, applied research, and extension/demonstration services. In addition, there is need to improve the mechanism for developing and testing agronomic, on-farm storage and marketing practices relevant to small-scale farming and the rural economy.

III. GENERAL

In response to these problems, this project is designed to strengthen the capability of existing institutions which are now serving the agriculture sector to extend their services to more small-scale farmers to enable them to increase production and incomes. The institutions to be affected are both private and public. Therefore, all relevant institutions, in concert with the Ministry of Agriculture, which is the major implementing agent with additional responsibility for coordinating the implementation of the projects' components, must be committed to the effort and must effectively cooperate and coordinate their efforts if a small farmer development strategy is to be executed.

The complete project consists of seven basic components: 1) credit expansion; 2) fertilizer procurement, processing and distribution; 3) seed multiplication; 4) small farm systems research; 5) marketing; 6) demonstration/extension including appropriate emphasis on the role of women in food crop farming; and 7) loan funds to import herbicides, pesticides, and other agricultural inputs at the intermediate technology level and raw material for their domestic production. This agreement concerns those elements other than the loan-funded commodities. The outputs of the fertilizer and seed multiplication components will be made accessible nationwide to as many farmers as possible. The credit component will provide funds to small-scale farmers cultivating 10 acres or less so that they can purchase these inputs. The extension/demonstration component will be geared specifically towards the small farmer. The marketing and research component will also be focused on the needs of the small farmer, but rather than being implemented nationwide initially they will be undertaken on an experimental basis in a limited geographical area. As meaningful, profitable results are identified they will be replicated in other areas of Ghana. Special efforts will be made to integrate and coordinate work programs of all implementing institutions/agencies to achieve maximum impact of all components.

The seed multiplication, research and extension/demonstration components will be implemented by the Ministry of Agriculture with support from the University of Ghana in respect to the home demonstration component. The credit, fertilizer and marketing components will be implemented by the Agricultural Development Bank (ADB), the Ghana Fertilizer Company (GFC) and the Bank of Ghana (BOG), respectively. The BOG will have the additional role of managing the foreign exchange allocations to the program. It will advance working capital requirements to the ADB in amounts equal to the value of the foreign exchange disbursed for loan financed commodities for sale such as: fertilizer, herbicides, pesticides, small farm equipment, etc., imported under the loans which the USG is prepared to negotiate in support of this program.

A MIDAS Project Executive Committee (MEPC) will be established under and chaired by the Ministry of Agriculture charged with coordinating the implementation of the project components to assure that small farmers (particularly those served by the FLOs) will have ready access to a package of improved inputs and technologies appropriate to their needs. The MEPC will be responsible for ensuring that the inputs provided under the project are effectively used to attain the project's goals and objectives with special emphasis on reaching small farmers.

The Ministry of Agriculture will assign a senior officer, preferably at the Deputy or Assistant Director level, as project manager and as chairman of the MEPC. The senior officer must be able to devote full time to these tasks and be given requisite responsibility and authority to enable the MEPC to effectively discharge its coordination and implementation functions.

A Permanent Advisory Committee (PAC) will also be established under and chaired by the Ministry of Economic Planning to assess, monitor and evaluate the project and to make recommendations to the MEPC for project adjustments and modifications.

The MEPC and PAC will be composed of representatives of the implementing agencies, i.e., MOA, GFC, BOG and ADB as well as representatives of MOF, MOEP and USAID. These various agencies will appoint representatives to the MEPC and PAC within two weeks of the date of this

Agreement and in the understanding that the MEPC will be charged with the immediate task of developing with USAID the documentation necessary to permit final negotiations of the loan-financed portion of the project to begin by December 15, 1976.

Initial Twelve Month Inputs of Phase I:

This agreement obligates \$1.8 million in AID grant funds to finance the initial 12-month period of activity of a coordinated effort between USAID, the MOA, the BOG, the ADB, and GFC. A separate agreement is expected to be negotiated committing U.S. loan funds in support of this program.

This agreement also commits the Government of Ghana (GOG) to provide and commit funds in the amount of $$\phi 751,000$$ from the budget for Ghanaian Fiscal Year 1976/77 and other sources for the first 12 months of operations of this program beginning October 1, 1976.

IV. SPECIFIC TARGETS AND ACTIVITIES

USAID and the GOG agencies listed in section III above will seek to carry out jointly the activities described below. A summary of funding commitments made herein is given in Annex B.

A. Small Farmer Credit Expansion (ADB)

The objective of this component is to expand the ADB's small farmer credit operations so that larger numbers of small farmers will have regular and timely access to small loans and annual production credits. Credit will be provided to farmers in cash for labor and in kind if credit is used to purchase production inputs. The latter will utilize the chit system as much as practicable in which farmers are given expense vouchers or chits with which to purchase these inputs from the various distributors, who will in turn exchange the chits or vouchers for cash at ADB.

The project will retain the existing 13 branch offices and 8 Farm Credit Service Offices (FaCSOs) and expand credit availability and accessibility by establishing new Farm and Loan Offices (FLOs) in outlying rural areas where there are concentrations of small farmers.

An in-service training program will be organized to meet the needs of an expanded and reoriented staff with appropriate loan approval authority. The training program will expand ADB's training in streamlining loan approval for loans to individual small farmers, disbursement and collection procedures as a continuing concept.

The U.S.G. has authorized a loan to finance commodities in relation to the small farmer credit expansion activities. AID is also prepared to consider future additional grant financing, subject to the availability of funds.

Project Inputs/Activities Committed by this Agreement

- 1. The Government of Ghana agrees that the Agricultural Development Bank (ADB) will:
- a. Establish not less than 9 new FLOs in the first year of the project in areas having substantial concentrations of small farmers. The establishment costs of FLOs will be loan funded by USAID, contingent upon the signing of the loan agreement. Each FLO will have a project officer in charge who will have appropriate loan approval authority; an assistant project officer responsible for coordinating input distribution and product marketing activities in the area served by FLOs; a senior loan assistant responsible for loan recoveries; and a loan assistant responsible for loan supervision and formation of groups.

The assistant projects officers, functioning as marketing/extension officers, will determine the amounts and types of fertilizer, seeds, pesticides, etc., required by the farmers served by the FLOs. They will integrate actions with the Extension Service and Home Extension Unit of the MOA to ensure that credit and inputs are properly utilized. Additionally, the marketing/extension officers will work closely with the distributors of fertilizer, seed and intermediate technology inputs relative to the expected demands for their respective inputs in a timely manner. Also, they will work within the marketing structure to provide timely information to

farmers and traders to encourage a smooth and profitable flow of farm produce to wholesale/ retail markets and for projecting marketable surpluses in areas served by the FLOs;

- b. Streamline and simplify loan/credit procedures and operations;
- c. Continue to decentralize loan approval authority and service activities permitting FLO staff to make over-the-counter loans at the FLOs;
- d. Undertake an effective coordination program with the MOA for loan/credit supervision by utilizing the Extension Service in assisting farmers with production, farm management and marketing practices;
- e. Design and conduct appropriate staff training programs in developing annual objectives and strategies for achieving them carrying out organizational research and evaluation activities, and performing all loan making and follow-up activities;
- f. Disseminate the findings of the applied research effort through the assistant projects officer and in liaison with the extension service field trials activity assisted by the field trials officer under the extension/demonstration component of the project;
- g. Hire and/or make available in a timely manner Ghanaian staff with the requisite technical skills to work jointly with the AID-funded advisors;
- h. Advance funds to the USAID in the amount of ¢10.000 per U.S. technician the first year and ¢7,000 per person each succeeding year in support of the joint program. The ADB's payment for the first 12 months will be made directly to USAID in a lump sum within sixty (60) days of the signature of this agreement. Funds for succeeding years will be provided upon request of USAID, contingent upon USAID's contribution to the project during those years;
- Provide administrative and secretarial support, and office space for the two AID-funded advisors;
- j. Provide for the full maintenance and operational costs of AID-funded vehicles, including those being utilized by AID-funded advisors. These vehicles will be titled and registered to the ADB, which will be responsible for clearing the vehicles upon their arrival in Ghana, for licensing, registering and purchasing insurance for them;
- k. Select appropriate candidates for participant training, pay the participant's salaries during the period of their training in the U.S. and provide economy class air transportation from Accra to Washington, D.C. and return. The ADB will also provide a warm clothing allowance and such other assistance as it usually grants its employees on study leave. The ADB also undertakes to employ the participants on their return, for a minimum period of two years and will take such measures as are necessary to ensure that each participant understands and honors his/her commitment to the project.
 - USAID agrees to provide:
- a. Two-year services of two U.S. advisors, one in training and one farm loan specialist; and short-term consultant services in evaluation, marketing, and development of training program curriculum:
- b. Participant training;
- c. Three vehicles, one for each of the full-term U.S. advisors and one for central office support;
- d. Training aids for use in Ghana.

B. The Ghana Fertilizer Company (GFC)

The objective of this component is to procure, process, package and distribute fertilizer throuhout Ghana (such distribution to be primarily through private enterprise/commercial channels, at the lowest possible price commensurate with a viable operation). This encompasses timely procurement, distribution, warehousing and sale of fertilizers at numerous outlets throughout Ghana where it will be readily accessible to farmers.

This component of the project will assist the GFC with development of its organizational structure, fertilizer marketing and distribution processes, engineering requirements and staff train-

ing. Grant funds from AID will be provided for procurement of training materials, U.S. technical services and participant training. GFC incremental contributions to the project will be used for construction of warehouse facilities and the recurrent operating costs of the expanded fertilizer blending and marketing operations. Within the framework of the project, USG has authorized a loan, the proceeds of which may among other things be used to finance the importation of fertilizer raw material, mixers, scales, conveyers and other equipment for the permanent fertilizer facility contemplated to be constructed in the second year of the project.

Project Inputs/Activities Committed by this Agreement

- 1. The Government of Ghana agrees that the Ghana Fertilizer Company (GFC) will:
- a. Obtain funds and hire staff and labor as required for management and operation of the company's activities:
- b. Provide administrative and secretarial support, and office space for the AID-funded technician;
- c. Provide for the full maintenance and operational costs including a driver when required, of the AID-funded vehicle, being utilized by the AID-funded technician. The vehicle will be titled and registered to the GFC which will be responsible for clearing the vehicle upon its arrival in Ghana, for licensing, registration, and purchasing insurance for it;
- d. Select appropriate candidates for participant training, pay the participants' salaries during the period of their training in the U.S. and provide them economy class air transportation from Accra to Washington, D.C. and return. The GFC will also provide a warm clothing allowance and such assistance as it usually grants its employees on study leave. The GFC also undertakes to employ the participants on their return, for a minimum period of two years in the positions for which they have been trained, and will take such measures as are necessary to ensure that each participant understands and honors his/her commitment to the project.
 - 2. USAID agrees to provide:
- a. The full time services of a technician specializing in fertilizer marketing/distribution;
- Short-term consultant services in chemical engineering, engineering and agronomy/marketing training;
- c. A vehicle to be utilized by USAID technicians;
- d. Training materials to be utilized in Ghana;
- e. Participant training.

C. Seed Multiplication

The objective of this component is to assist the Seed Multiplication Unit (SMU) of the Ministry of Agriculture in expanding and improving seed production and processing activities and to enable it to distribute on a wider scale larger volumes and varieties of high quality seeds to farmers.

The SMU is currently being organized into three sections for operational purposes: the foundation seed, certified seed and certification/seed testing sections. Each will be headed by a well trained section chief. The foundation seed section will multiply breeder seed to a quantity required for large-scale production by certified seed contract growers. The certification/testing section will organize, monitor and inspect production of an increasing number of contract certified seed growers and enforce the provisions of the Seed Law (enacted in 1972) which established seed certification regulations and standards. The SMU, with AID assistance, will strengthen and improve the organization, management, staff and facilities at three foundation seed facilities (one each at Winneba, Tamale and Kumasi), two certified seed facilities (one each at Winneba and Kumasi), and a seed testing facility in Accra.

- 1. The Government of Ghana agrees that the MOA/Seed Multiplication Unit (SMU) will:
- a. Continue and improve the operations and production of appropriate foundation seed on three foundation seed farms at Winneba, Kumasi and Tamale;

- b. Construct the physical plant to house the seed processing equipment at the Winneba seed farm;
- c. Contract with appropriate private growers to multiply certified seed from the foundation seed produced on the seed farms and perform the required certification services;
- d. Arrange for the widest possible distribution of the seed. This will encompass developing a program for distributing seed through the distribution/marketing channels arranged for fertilizer;
- e. Provide recurrent costs for operation of the seed farms and the Winneba Seed processing plant;
- f. Hire and/or make available in a timely manner Ghanaian staff with the requisite technical skills to work jointly with the AID-funded technicians;
- g. Advance funds to USAID in the amount of \$\psi\$10,000 per U.S. technician in the first year and \$\psi\$7,000 per person in each succeeding year as a contribution to the support of the project. The MOA's payment for the first 12 months will be made directly to USAID in a lump sum within sixty (60) days of the signature of this agreement. Funds for succeeding years will be provided upon request of USAID contingent upon USAID's contribution to the project during these years;
- h. Provide administrative and secretarial support, and office space for the two AID-funded technicians;
- i. Provide for the full maintenance and operational costs, including a driver when required, of the AID-funded vehicles, including those being utilized by AID-funded technicians. These vehicles will be titled and registered to the MOA, which will be responsible for clearing the vehicles upon their arrival in Ghana, for licensing, registration, and purchasing insurance for them;
- j. Select appropriate candidates for participant training, pay the participants' salaries during the period of their training in the U.S. and provide economy class air transportation from Accra to Washington, D.C. and return. The MOA will also provide a warm clothing allowance and such other assistance as it usually grants Ministry employees on study leave. The MOA also undertakes to employ the participants on their return, for a minimum period of two years in the positions for which they have been trained and will take such measures as are necessary to ensure that each participant understands and honors his/her commitments to the project.
 - 2. USAID agrees to provide:
- a. The full-time services of two U.S. technicians in the fields of seed processing and seed enterprise management/operations, and short-term consultant services in agricultural engineering;
- b. Two vehicles to be utilized by the U.S. technicians;
- c. Farm machinery, equipment and vehicles which could include a pickup truck, a heavy duty 14-ton truck, tractors, disc plows, disc harrows, cultivators, maize seeders, maize pickers, crop sprayers, groundnut seeders, small grains drill, a self-propelled combine;
- d. Participant training;
- e. Training materials to be utilized in Ghana.

D. Small Farm Systems Research

This component of the project is essentially a pilot activity. The objectives are (a) to assist the MOA in establishing an applied, interdisciplinary research capability; and (b) to improve and expand the coordinative links between the MOA's research unit and other institutions which are providing services to the Ghanaian smallholder. The Government of Ghana (GOG) agrees that this component will be implemented and managed by the Division of Economic Research and Planning Services (DERPS) of the MOA. It is designed to gather basic data and test improved cultivation and storage practices on small holdings. It will focus on applied socio-economic and agronomic research which will be used to help determine the demand for an appropriate mix of various inputs as well as the small farm production constraints as seen by the small farmer.

The area in which this component will be sited will be the same district in which the marketing component of this project and possibly the same district in which the proposed District Planning

and Rural Development Project will be implemented. This will be in or near the Atebubu District, Brong-Ahafo Region in the transitional/savannah zone. Since little is known about the mechanics of small farm systems in Ghana, this approach of focusing a concentrated effort in one district will (a) significantly improve and expand the institutional infrastructure serving the small farmers of this district, (b) develop technological input packages and interventions relevant to the socioeconomic and ecological situations of the small farmers, and (c) provide valuable information on the management of small farm systems which can be applied to other areas of Ghana.

Funds will be used to establish a research station in or adjacent to the Atebubu District and to staff it with an interdisciplinary research team. The GOG agrees that the staffing of the research activity shall include the following disciplines:

- a. Agronomy—cropping and farming systems, mixed/inter/monocropping and production practices;
- b. Agricultural economics—the economics of research results and of proposed innovations on farms, incomes farm management and marketing;
- Rural sociology—identifying the sociological/cultural factors affecting the adoption of new practices and technology, and the formulation of new means for coping with inhibiting factors;
- d. Extension—developing methods and materials for extending research results to farmers, establishing two-way communication between research and production to assure that research focuses on small farm problems, and to assure appropriate farmer feedback for future research activities:
- e. On-farm storage—identifying, developing and testing new structures and systems which can
 be easily and cheaply constructed and implemented by farmers and which will reduce on-farm
 wastes and losses;
- f. Entomology and pathology—short-term consultancy will be obtained as the need arises in these areas,

By establishing the research station and activity in the transitional zone, the findings are expected to have maximum replicability and transferability to both the forest and savannah zones.

Initial activity undertaken during this funding period will be comprised of efforts to design an appropriate small farmer research program.

Following the successful design of the proposed research activity, and subject to the availability of funds, AID is prepared to provide long-term technical services, selected commodities and participant training to assist in implementing the research program.

Project Inputs/Activities Committed by this Agreement

- 1. The GOG agrees that the MOA/DERPS will:
- a. Contribute field, support and clerical staff and operating costs of the activity;
- b. Provide appropriate research personnel to cooperate with the AID-funded consultants in designing the research program.
- 2. USAID agrees to provide: appropriate short-term consultants to cooperate with MOA/DERPS personnel in the design of the research program.

E. Marketing

The objective of this component of the project is to improve the understanding of the structure and functioning of the traditional food crop marketing system in Ghana which will enable the design, execution and evaluation of more effective marketing interventions to the private sector. This objective will be accomplished by establishing a district pilot marketing program designed to increase the services which small traders, distributors and farmers' associations provide by increasing efficiency and competition within traditional marketing channels. Marketing costs should be significantly reduced by providing credit for improved transport (tractor/trailers), storage, handling and processing facilities in village markets. The specific types of interventions and assistance will be determined after careful study of the marketing structure within the pilot area.

The pilot activity will be implemented in the same area as the small farm applied research component of this project, and possibly in the same district as the proposed District Planning and Rural Development project. At least two new FLOs will also be established in the area. An initial field baseline survey will be conducted to determine the extent to which farmers are being provided the required marketing services and by whom these services are provided. Following this survey a few (approximately 3–5) small traders and/or farmer cooperative/marketing associations will be selected to participate in the program.

Care will be taken that this component does not negatively impact on women traders who will be considered when participating traders are selected. Traders/associations will be offered the opportunity to obtain credit from BOG's Small Borrower Credit Guarantee scheme at prevailing commercial interest rates (currently about 12 percent) for working capital to purchase tractors and trailers and to establish modest assembly/storage facilities. They will make all operational and management decisions and will act as independent businessmen. All incremental costs to the trader/association, including labor and operational expenses, will be paid by the trader/associations and derived from income earned in buying and selling commodities. It is also probable that the traders/associations will become involved in the delivery of production inputs and tractor hire services to the farmers in the area.

While the traders/associations will be expected to make their own management decisions, they will be required to allow a Ghanaian area marketing specialist, assigned either to the BOG or to MOA/DERPS, to fully observe and review (not manage) their operations, including monitoring of prices and operating expenses. Follow-up surveys of about three months' duration will be organized by the BOG in conjunction with MOA/DERPS during the second through fourth years of the project. The purpose of these surveys will be to (a) determine the effects that increasing traders' mobility and access to credit will have had on their marketing operations, and (b) serve as ongoing evaluations to identify required program adjustments. At the end of the project there will be a final evaluation survey to determine the impact of this component on farm production and incomes as well as on marketing services in the area and to determine the suitability of replication and diffusion of similar activities in other areas of Ghana.

Given the experimental nature of this component all inputs will be grant funded by AID. These include baseline, follow-up and impact evaluation surveys; U.S. technical assistance (a marketing specialist consultant); Ghanaian staff (area marketing specialists and a marketing coordinator); miscellaneous expenses; facilities construction, and transport equipment (i.e., tractor and trailers, materials for the construction of assembly points and equipping them with scales, crop dryers, tools, etc.).

- 1. The GOG agrees that the Bank of Ghana in conjunction with MOA/DERPS shall:
- a. Cooperate with USAID in and provide supporting services to conduct the baseline surveys;
- b. Ensure that loans made with funds provided by USAID shall be extended to private traders or cooperatives at prevailing commercial terms for working capital, to purchase tractors and trailers, to construct simple rural assembly points and to finance advance purchases of agricultural inputs;
- c. Establish a revolving fund from loan repayments of principal and payments of interest on loans made as a result of the commodities provided by AID on a grant basis under this project. A reasonable amount may be withheld from the fund to finance BOG's cost in connection with its participation in the marketing activity. The revolving fund will be used to continue and expand the credit element of this activity;
- d. Implement this activity in the same geographic area as that in which at least two (2) new FLOs are established and in which the small farm research activity is conducted;
- Contract and/or make available in a timely manner Ghanaian staff with the requisite technical skills to work jointly with the AID-funded advisors;

- f. Select appropriate candidates for participant training, pay the participants' salaries during the period of their training in the U.S. and provide them economy class air transportation from Accra to Washington, D.C. and return. The BOG will also provide a warm clothing allowance and such assistance as it usually grants its employees on study leave. The BOG also undertakes to employ the participants on their return, for a minimum period of two years in the positions for which they have been trained, and will take such measures as are necessary to ensure that each participant understands and honors his/her commitment to the project;
- g. Provide for the full maintenance and operational costs, including driver when required, of the AID-funded vehicle being utilized for project activities. The vehicle will be titled and registered to the BOG, which will be responsible for clearing the vehicle upon its arrival in Ghana, for licensing, registering and purchasing insurance for it.
 - 2. USAID agrees to provide:
- a. Funds to perform the baseline study;
- b. One vehicle to be utilized in project activities;
- c. Short-term U.S. consultant services in marketing;
- d. Participant training;
- e. Funds for the full-time services of a Ghanaian marketing coordinator;
- f. Miscellaneous operating expenses.

F. Extension/Demonstration

The primary objectives of this component are (1) to expand the field demonstration programs of the Crop Production Division and the Home Extension Unit of the MOA using appropriate fertilizer mixes, improved seeds and agronomic practices, and (2) to strengthen the capabilities of the Home Extension Unit, supported by the Department of Home Science of the University of Ghana, to serve more women in their roles as farmers, farm laborers and home managers.

Crop Production Division (CPD)

This component of the project will enable the Crop Production Division to increase to 200 the number of field trial demonstrations it can conduct annually on a national basis. This effort will be directly related to and utilize appropriate inputs, services and practice of the other components of the project and will apply these through demonstrations on farmers' fields. It is specifically understood that the findings of the applied research component will be extended through the Division's field trials program. By showing the direct applicability of the various inputs to the farmers' specific situations, and by providing credit with which to purchase these inputs, it is anticipated that small farmers will have adequate incentives to purchase these inputs and to increase their agriculture production.

Home Extension Unit (HEU)

The objective of the Home Extension Unit is to help improve the living standards of farm families by (a) encouraging improved nutrition through the production of foods which are rich in protein and vitamins, (b) encouraging improved storage, processing and preservation techniques to minimize food losses and to increase food availability throughout the year, and (c) extending information on improved management and production techniques of the farm and household resources.

Each field worker is expected to reach 3 villages in a sub-district during the first year. Within each sub-district (10–18 villages), 30 women and 20 youths are expected to participate in the program. During each ensuing year, the field worker is expected to reach one additional village, i.e., 20 additional women and 10 additional youths in these villages. Eventually, the program will have a total coverage in all of Ghana's 62 districts with about 250 sub-districts.

Field workers are supported, supervised and evaluated by district supervisors who in turn are responsible to the headquarters in Accra, staffed by three professionals.

Annual work programs of field workers consist of five phases. During January/February, individual agents teach village groups the principles of nutrition in relation to food production and diet improvement. Follow-up demonstrations are held at group meetings and in individual compounds and households. During March/June, the major planting season, field workers advise and demonstrate improved practices in producing staple food crops and legumes, vegetables, fruits, poultry, rabbits, goats and sheep. This is done through group discussions and demonstrations as well as intensified follow-up visits to individual holdings. During July/August, demonstrations focus on improved practices regarding processing of all crops, on-farm storage, and preservation of products consumed by the household. During September/November, the minor crop season, agriculture extension work is concentrated on improvements in off-season cultivation; also principles of improved home management practices are intensified and possibilities for the application of intermediate technologies in the home and on the farm explored.

Home Science Department (HSD), University of Ghana

The Unit receives support from the Department of Home Science at the University of Ghana. This support includes research back-stopping for field activities, development of instructional materials and intermediate (labor-saving) farm/home technologies, and short-term training programs for field workers. However, due to the unavailability of sufficient space and facilities, research materials and equipment, the university has been unable to provide the additional support to the Unit required for its expanded programs.

The major limiting factors to increasing the capability of Home Extension Unit, working together with the Department of Home Science at the University, are: a) the limited number of trained agents that are available; b) inadequate vehicles to transport staff, materials and equipment to the various project sites; c) inadequate demonstration and training materials for farm demonstrations and staff training; and d) inadequate facilities for demonstrations.

In late FY 75, AID provided \$50,000 in grant assistance under the Women in Development Project (0075) to the Home Extension Unit and the Department of Home Science. These funds were to establish the first stage of a workshop/laboratory on the campus of the University, farm/demonstration centers in rural areas/villages, and to organize training workshops to be held at the University. This was the first phase of a program to significantly expand the coverage of the Unit and the support it receives from the University. Subject to evaluation of this activity, the MIDAS project, in addition to providing materials to the Extension Service, will continue AID assistance initiated in the Women in Development project.

The GOG contribution to this component largely represents costs of some of the demonstration materials (fertilizer and seeds) and the recurrent costs of the CPD, HEU and HSD.

- The Government of Ghana agrees that the MOA will:
- a. Disseminate the findings of the applied research effort through the extension service field trials
 activity assisted by the U.S. field trials officer, by the Small Farmer Applied Research Activity
 and in liaison with the assistant projects officers attached to the FLOs;
- b. Design an appropriate data collection and evaluation system for the agronomic/fertilizer demonstrations, periodically inspect the demonstrations and record responses and yields resulting from the trials; and assure that the information is disseminated to producers and input suppliers;
- c. Assure effective outreach of the Crop Production Division. Close coordination at all working levels will be maintained with the CIDA-Guelph assisted Extension Officer Training Program, the FAO assisted Field Trials and Planning Program, the USAID assisted Field Trials Program, ADB's Small Farmer Credit Program, GFC's Sales Promotion Program, the MOA Department of Research and Planning Services and the Home Extension Unit;
- d. Hire and/or make available in a timely manner Ghanaian staff with the requisite technical skills to work jointly with the AID-funded advisor;

- e. Advance funds to the USAID in the amount of \$\psi 10,000\$ for each U.S. technician the first year and \$\psi 7,000\$ per person each succeeding year as a contribution to the support of the program. The MOA's payment for the first 12 months will be made directly to USAID in a lump sum within sixty (60) days of the signature of this agreement. Funds for succeeding years will be provided upon request of USAID, contingent upon USAID's contribution to the project during those years;
- f. Provide administrative and secretarial support, and office space for the AID-funded advisor;
- g. Provide for the full maintenance and operational costs, including a driver when required, of the AID-funded vehicles including that provided under an earlier project being utilized by the AID-funded advisor. The vehicles will be titled and registered to the MOA, which will be responsible for clearing the vehicles upon their arrival in Ghana, for licensing, registration, and purchasing insurance for them in line with GOG policy.
 - 2. The MOA Home Extension Unit agrees to:
- a. Establish 100 trial demonstrations involving fertilizer, seeds and agronomic practices on farmers' fields, managed to the maximum extent by the farmers, with guidance from the Extension Service;
- b. Design an appropriate data collection and evaluation system for the agronomic/fertilizer demonstrations, periodically inspect the demonstrations and record responses and yields resulting from the trials, and assure that the information is disseminated to producers and input suppliers;
- c. Carry out the activities stated in the objectives:
 - (1) Each field worker reach and implement activities in 3 villages;
 - (2) Establish and implement activities in 10 farm/home demonstration centers;
- d. Provide recurrent costs for vehicle operation/maintenance, demonstration centers, staff, etc.;
- e. Hire and/or make available in a timely manner Ghanaian staff with the requisite technical skills to work jointly with the AID-funded advisor;
- f. Select appropriate candidates for participant training, pay the participants' salaries during the period of their training in the U.S. and provide economy class air transportation from Accra to Washington, D.C. and return. The MOA will also provide a warm clothing allowance and such other assistance as it usually grants MOA employees on study leave. The Home Extension Unit also undertakes to employ the participants on their return, for a minimum period of two years in the positions for which they have been trained and will take such measures as are necessary to ensure that the participant understands and honors his/her commitment to the project;
- g. Establish 10 farm/home demonstration centers whose design and costs shall be commensurate with those of small-scale farm housing practices in each respective area. They will be established at sites to be identified later.
 - 3. Department of Home Science agrees to:
- a. Provide research backstopping support, develop instructional materials and intermediate laborsaving farm/home technologies, and conduct two short-term training programs for field workers for the Home Extension Unit:
- b. Provide recurrent costs for staff, laboratory operation, etc.
 - 4. USAID agrees to provide:
- a. To the Extension Division:
 - Equipment, demonstration materials, fertilizer, seeds and training aids;
 - A field vehicle for use in the demonstration program;
- b. To the Home Extension Unit:
 - Vehicles for the Unit's field staff;
 - Equipment, demonstration materials, fertilizer, seeds and training aids;

- Farm/home demonstration centers;
- Participant training;
- c. To the Department of Home Science:
 - Training materials for workshops;
 - Addition to laboratory, equipment, tools and instructional materials;
 - Funding for staff visits to field personnel;
- d. Services of a full-time fertilizer demonstration/trials specialist.

V. PROJECT EVALUATION

A two stage evaluation system will be adopted to review project efficiency, effectiveness and progress toward the realization of project objectives. The system will be comprised of routine evaluations carried out during the life of the project and of a more comprehensive evaluation conducted at the end of the project period.

The Division of Economic Research and Planning Services (DERPS) of the MOA and the ADB's Research Department will be jointly responsible for the data collection and analysis needed for the evaluation process. Both types of evaluation will require inputs of implementing agencies as well as an overall assessment of the project by the Permanent Advisory Committee. The Committee will work with appropriate AID staff and AID-funded consultants (Ghanaian and expatriate) to conduct the end of project evaluation.

Some of the necessary baseline data for evaluating project impact have been collected. The Permanent Advisory Committee, assisted by AID, evaluation and statistical experts, by DERPS and by the ADB Research Department, will verify, revise and expand this data as necessary and collect additional data as the project is implemented. The existing information will be further strengthened by the information which the ADB will collect as part of its loan application and approval process, by sample surveys of farmers in selected areas served by FLO's and by the research component and the baseline surveys in the marketing component.

Routine Evaluation

The routine evaluation process is designed to provide information on a continuing basis on the implementing agencies' activities and performance as they affect the target population (the small farmer). Each implementing agency will submit annual reports for review by USAID and subsequent discussion by the Permanent Advisory Committee in order to facilitate planning of the actions on unresolved issues or problems affecting project success.

The MEPC, PAC and respective AID project officers will be responsible for timely submission of the evaluation reports. The reports will include a description of activities carried out under each project component and analysis of the impact of these activities on the project outputs, purpose and goal. An evaluation consultant will assist in the design of the format of these reports. On the basis of the quarterly reports, the Permanent Advisory Committee will suggest and adopt measures to overcome any problems and recommend program adjustments.

Evaluation of Total Project Activities

At the end of the first phase of the project period in January 1978, a joint GOG/AID evaluation effort will assess project progress against project goals, objectives and targets, identify needed changes in project design and implementation and recommend additional financial and manpower resources for activities to be undertaken during the second two-year phase of the project.

- The GOG agrees to:
- a. Establish the Permanent Advisory Committee which should be composed of members of the Ministries of Economic Planning, Finance and Agriculture, the Bank of Ghana, the Agricultural Development Bank, the Ghana Fertilizer Company and USAID;

- b. Develop a schedule of activities and specific work programs for the Permanent Advisory Committee;
- c. Develop a detailed work plan and schedule for baseline data collection and evaluation.
 - 2. USAID agrees to:
- a. Provide short-term consultant services to assist in establishing an evaluation system, including
 (I) quarterly performance reports to assess the performance of the various implementing agencies
 and (II) the baseline benchmarks survey required for evaluation of total project impact;
- b. Provide a field vehicle for the use of the Permanent Advisory Committee.

VI. SPECIAL PROVISION

A. Assignment

The Government of Ghana agrees to execute an assignment to AID upon request, of any cause of action which may accrue to the GOG in connection with or arising out of the contractual performance of breach of performance by a party to a direct contract with AID financed in whole or in part out of funds provided by the United States Government under this Agreement.

B. Source

Disbursements under this Grant will be used exclusively to finance the costs of goods and services having their source and origin in the United States and/or in Ghana.

C. Title to and possession of all household furniture and household appliances funded by the U.S. and purchased under this project for use of the U.S. specialists shall remain with the U.S. Government.

VII. DIRECTOR'S WAIVER

Under the authority of HB 19, Section 1D.3a, the USAID Director hereby waives for a period of twelve months from this date the requirement that PIO/Ps for training, and for a period of six months that PIO/Ts for services and PIO/Cs for commodities be submitted concurrently with the signing of this Project Agreement.

ANNEX B
SUMMARY OF USAID GRANT INPUTS OBLIGATED UNDER THIS PROJECT AGREEMENT (\$000)

| Subactivity | Technical services | Commodities | Participants | Other costs | Total |
|--------------|-----------------------|-------------|--------------|----------------|-------|
| Credit | 216 | 97 | 35 | | 348 |
| Fertilizer | 160 | 27 | 28 | | 215 |
| Seed | 176 | 515 | 57 | | 748 |
| Research | 34 | 10 | | | 44 |
| Marketing | 86 | 15 | 15 | 14 | 130 |
| Exten./Demon | 80 | 140 | 18 | 47 | 285 |
| Evaluation | 20 | 10 | | | 30 |
| TOTAL | 772 | 814 | 153 | 61 | 1,800 |

Note. The above figures are illustrative. The individual line items may vary as specific elements are implemented and final budgets prepared.

Total Estimated GOG Contribution During Year One Including GOG Incremental Budget Contributions (\$000)

| Subactivity | Technical services support | Operating costs | Participants | Other | Total |
|---|----------------------------------|-----------------|--------------|-------|-------|
| Credit—ADB* | 53 | 377 | 5 | | 435 |
| Fertilizer—GFC* | 30 | 1,388 | 15 | | 1,433 |
| Seeds—MOA† | 51 | 17 | 7 | 252 | 327 |
| Research—MOA† | 76 | 70 | 5 | 100 | 251 |
| Marketing—BOG | 2 | 2 | 5 | | 9 |
| Extension/Demonstration—MOA† | | 139 | 9 | | 173 |
| TOTAL | 237 | 1,993 | 46 | 352 | 2,628 |
| †Total Incremental GOG Budget Contributions | 152 | 226 | 21 | 352 | 751 |

^{*}These contributions will be funded out of the profit margins expected from the operations/activities resulting from this program.

NOTE. The above figures are illustrative. The individual line items may vary as specific elements are implemented and final budgets prepared.