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AMENDMENT

PROJECT PAPER

USAID/CAIRO
DEVELOPMENT
INFORMATION
CENTER

Egypt: Small Farmer Production
263-0079

JUN 25 11 47 AM '84

19 JUN 1984

EXECUTIVE SECRETARIAT

ACTION MEMORANDUM FOR THE ADMINISTRATOR

FROM: AA/NE, W. Antoinette Ford

THRU: AA/PPC, Richard A. Derham, (Acting)

SUBJECT: Egypt Small Farmer Production Project Paper
Amendment, 263-0079

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Problem: Your approval is required to amend the authorization for the Egypt Small Farmer Production project to increase the life of project funding from \$25,000,000 to \$49,000,000.

Background: The project's purpose is to develop and apply in three governorates an improved credit and input system to provide small farmers with access to agricultural inputs including seed, fertilizer, cash, technological information and capital equipment. The project began in 1979. In early 1983, internal and external evaluations were carried out and both recommended that AID continue to support the project. The project has been notably successful in: (1) financing a wide variety of farm enterprises; (2) increasing production through greater use of purchased inputs and improved technology; (3) raising interest rates and (4) collecting loans. This amendment will provide funds to expand the area covered and address items noted in evaluations, namely improving the monitoring and data analysis component, consolidating village banks into three improved district level credit systems and finishing construction of village banks and input storage facilities which have been the lagging elements of the project.

Discussion: This amendment went before the Project Review Committee (PRC) and Near East Advisory Committee (NEAC) in March 1984. The NEAC decided to forward the amendment for your approval subject to Mission's agreement that the amendment specify more explicitly the characteristics of the credit and input system which is being modeled. These characteristics would include: 1) a credit system which operates at or near market rates of interest; 2) a credit system with deposit rates for savings which generate increases in the number of depositors and amounts of savings (savings mobilization); 3) an input delivery system for loans and agricultural inputs based on market pricing principles as opposed to subsidization; 4) lending, rather than granting, funds for construction, and 5) a credit program which is ultimately self-financed. Following discussions with the Government of Egypt, the Mission agreed to

the NEAC's formulations. These items have been incorporated into the logical framework and other appropriate sections of the amendment.

Annex four of the amendment provides justification for the procurement of approximately 124 motorcycles at an estimated cost of \$216,000 from A.I.D. Geographic Code 935 origin.

There are no human rights issues under Section 502B of the FAA that would preclude the provision of this assistance.

A Congressional Notification was sent to Congress on May 31, 1984 and expired on June 15, 1984 without objection.

Recommendation: That you approve this amendment and the obligation of \$24 million in FY 84 by signing the attached authorization.

Attachments:

- A - Project Authorization
- B - Project Paper

Clearance:

GC:HFry Date 6/21/84
PPC/PD PR: EHullander Date

Second Amendment to the
Project Authorization

Name of Country: Arab Republic of Egypt
Name of Project: Small Farmer Production
Number of Project: 263-0079

1. Pursuant to section 531 of the Foreign Assistance Act of 1961, as amended, the Small Farmer Production Project for the Arab Republic of Egypt was authorized on the 17th of July 1979 and amended on the 25th of April 1980. That authorization is hereby further amended as follows:

a. The first paragraph of the authorization is amended to read as follows:

"Pursuant to section 531 of the Foreign Assistance Act of 1961, as amended ("the Act"), I hereby authorize the Small Farmer Production Project (the "Project") for the Arab Republic of Egypt (the "Grantee") involving planned obligations of not to exceed Forty-Nine Million United States Dollars (\$49,000,000) in Grant funds (the "Authorized Amount"), subject to the availability of funds in accordance with the AID/OYB allotment process, to help in financing foreign exchange and local currency costs of the Project."

b. Section a. Source and Origin of Goods and Services is amended to add to paragraph (3) thereof:

"I hereby find that special circumstances exist which justify a waiver of FAA Section 636(i) and permit procurement of approximately 124 motorcycles worth approximately \$216,000 from Geographic Code 935 source and origin under funds provided by the Second Amendment of the Project Grant Agreement, and certify that exclusion of procurement from Free World Countries other than the cooperating country or countries included in Code 941 would seriously impede attainment of U.S. foreign policy objectives and objectives of the Foreign Assistance Program.

c. Paragraph (2) of Section d Covenants, is amended as follows:

1) Subclause (a) is deleted and the following text substituted therefore:

"Project loans financed under the Grant Agreement and made prior to June 1, 1984 shall be made at a rate of at least 8% for short-term loans up to 14 months, and at 10% for medium and long-term loans or at the prevailing rate, whichever is higher; all Project loans made after June 1, 1984 shall be at a rate of 14% or at the prevailing rate, whichever is higher."

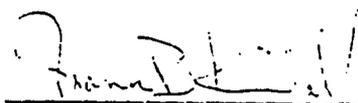
2) Subclause (c) is deleted and the following text substituted therefore:

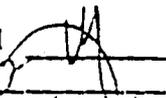
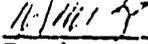
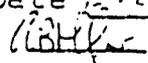
"Subsequent to the date of the Second Amendment to the Grant Agreement all project loan funds shall be kept in revolving funds at the Village Bank level and repayments of loans made to farmers under the credit component of the Project shall be placed in the same revolving funds and shall be available for relloan to farmers, except as provided in subclause (f) herein below.

3) A new subclause (f) is added, as follows:

"Up to one-third of the interest collected by a Village Bank on Project loans may be used to finance the added Village Bank administrative and operating costs of the SFPP Program.

2. The authorization cited above, as previously amended, remains in force except as hereby further amended.


Administrator
June 25, 1984
Date

AA/NE, W. A. Ford  Date 6-18-84
GC, H. Fry  Date 6-21-84
AA/PPC, R. Derham, (Acting)  Date 6/24/84

REVISED 6/8/84

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add
 C = Change
 D = Delete

Amendment Number: One

DOC. NO. 3

2. COUNTRY/ENTITY
Egypt

3. PROJECT NUMBER
263-0079

4. BUREAU/OFFICE
USAID/Cairo

5. PROJECT TITLE (maximum 40 characters)
Small Farmer Production

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY
07/31/87

7. ESTIMATED DATE OF OBLIGATION
(Under "B" below, enter 1, 2, 3, or 4)

A. Initial FY 84

B. Quarter

C. Final FY 85

8. COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY 79			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	78	31	109	9,570	39,430	49,000
(Grant)	78	31	109	9,570	39,430	49,000
(Loan)						
Other						
U.S.						
Host Country						
Other Donor(s)						
TOTALS	78	31	109	9,570	6,551	70,121

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1)				25,000		24,000		49,000	
(2)									
(3)									
(4)									
TOTALS				25,000		24,000		49,000	

10. SECONDARY TECHNICAL CODES (maximum 5 codes of 3 positions each)

041 011 012 013

11. SECONDARY PURPOSE CODE
142

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code BS
B. Amount 12,000

13. PROJECT PURPOSE (maximum 480 characters)

To develop and apply an improved pilot credit and input system that is replicable.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final 06/8/86

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000 941 Local Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ___ page PP Amendment)

This amendment will complete work which remains to be accomplished within the original terms of the pilot project, namely: consolidation of the improved credit system at the district bank level; better analysis of the results of the pilot operations; and completion of building construction.

17. APPROVED BY

Signature: *M.P.W. Stone*
Title: M.P.W. Stone, Director

Date Signed MM DD YY

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY 5

Small Farmer Production Project (0079)
Project Paper Amendment

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Project Committee

Chairman	Arnold Radi, AGR/A
Agricultural Economist	Jonathan Sleeper, AGR/PAD
Program Assistant	Saniya Amin, AGR/PAD
Engineer	Roger Russell, AGR/ILD
Program Officer	David Dulavey, DPPE
Program Economist	David Dod, DPPE
Evaluation Officer	Emily Baldwin, DPPE
Attorney	Belinda Barrington, LEG.
Financial Analyst	Tom Patcher, FM.
Training	Elmer Fales, HRDC

Glossary

PBDAC	Principal Bank for Development and Agricultural Credit
VB	Village Bank
SFPP	Small Farmer Production Project
MIS	Management Information System
IRR	Internal Rate of Return
SAS	Supporting Agricultural Systems

I. Recommendations and Summary

A. Recommendations

It is recommended that AID/W approve a grant in the amount of \$24.0 million, to be funded in a single increment in FY 1984, for this amendment to the Small Farmer Production Project (263-0079). Local currency costs amount to L.E. 21.73 million to be funded through dollar conversion. AID grant funds together with a GOE contribution of LE 13.089 million in this project paper amendment will supplement a five-year project with a current AID funding level of \$25.0 million and GOE contribution of LE 8.0 million, bringing total AID funding to \$49.0 million and total GOE funding to LE 21.0 million. It is also recommended that the current PACD (7/31/85) be changed to 7/31/87.

This project upgrades small farmer lending operations of the Principal Bank for Development and Agricultural Credit (PBDAC) through its local affiliates, the Village Banks (VB). This amendment will complete work begun under the project, namely consolidation of the credit system in three banking districts, better analysis of the credit and farm production improvements, and completion of construction.

B. Summary

The PBDAC is the sole source of institutional credit for Egypt's three million small farmers. In 1982, it distributed over LE 600 million in short- and medium-term loans. All farmers deal with the PBDAC on a cash or loan basis, as it is also an important source of fertilizer and other inputs as well. Farmer loan repayment exceeds 95 percent.

Despite this impressive record, there are problems in many areas of PBDAC operations: inadequate storage facilities; lack of short-term and particularly medium-term funds; overly centralized authority and complex procedures for loan processing and approval; inadequate management practices; inability to capitalize its loan funds lent at subsidized interest rates; and restrictive requirements for collateral.

In order to demonstrate to the PBDAC and the GOE in general that many of these problems could be overcome at the Village Bank level, AID initiated the Small Farmer Production Project in 1979. On a pilot basis, the project has stream-lined the loan processing and approval system in 27 of the approximately 700 Village Banks in the country, supplemented the PBDAC loan portfolio with a very wide range of short- and medium-term loans for farm investments, provided extension assistance to farmers for new technologies, trained bank personnel in modern methods of loan analysis and accounting, and improved input-handling and storage facilities.

This Project Paper Amendment should be read in conjunction with the original Project Paper, Small Farmer Production (263-0079), dated 5/31/79, and the Project Grant Agreement, dated 7/25/79.

The vast majority of farmers taking out loans in the project cultivate extremely small holdings (less than one feddan) and would not otherwise qualify for credit because of strict collateral requirements under the traditional PBDAC system. Based upon Farm Management data collected under the project, an economic analysis in Annex 2 of this paper indicates that farmer investments financed through the project have substantially increased farm incomes, and that the project as a whole is an economic use of AID and GOE funds.

Both an internal, and separate external, evaluation in early 1983 favorably reviewed the project, determined that additional AID financing of loanable funds was a viable use of development monies, and recommended that the GOE and AID continue to support the project. Recommendations by the separate AID evaluation are addressed in Annex 3 of this paper.

This proposed amendment provides additional funds to complete work begun in the pilot project. The scope and purpose of the project remain unchanged: to develop and apply in three governorates an improved credit and input (including technological information) system. The emphasis of the project continues to be upon credit and the credit delivery system. Secondary areas of concern are: provision of extension assistance; improved input handling and storage; training of bank personnel; improved loan/client information management; and analysis of developmental issues.

The work remaining to be accomplished comprises three areas:

1. Consolidation of three banking districts into the SFPP program, with a unified, improved credit delivery and information management system, including non-restricted lending and higher interest rates. In this respect, the Small Farmer Project can be viewed as the first definitive step towards rationalization of interest rate policy in Egyptian agriculture. Under this amendment, the PBDAC contribution (about LE 10.0 million) will be in effect to shift about two-thirds of its current loan portfolio in the 22-Village Bank consolidation area from its current system (subsidized interest rates, prescriptive lending) to the SFPP system (interest rates closer to market rates, profit-oriented lending). Under this project paper amendment, AID will provide \$12.0 million in LE loan funds to the project. A brief discussion of loan activities and credit requirements under this amendment is contained in Annex 1.

2. Improvement of the monitoring and data analysis component of the project. The external evaluation found that credit tied to extension does result in increased farm production in Egypt. But momentum under the project has been so rapid that the Farm Record data collected under the project has not been properly analyzed to indicate the optimal mix and relative impacts of credit, extension, and inputs. This amendment will provide \$290,000 to fund an outside contractor to perform this important function.

3. Completion of construction of the Village Banks and input storage facilities in the original 27-Village Bank area. In Amendment Number One to the Grant Agreement, AID agreed to provide, within the funding limits of the original PP, financing for the construction of a portion of the Village Agencies (new PBDAC storage facilities) and half of the funding required for the new construction of a portion of the 27 Village Banks. Under this amendment, an additional \$6.65 million is sought to meet the final cost estimates for the proposed construction component as amended.

II. PROJECT BACKGROUND

A. General

In the 1970's, Egyptian agriculture was characterized by slow growth. At the same time, both population and income grew rapidly, and there was a corresponding increase in higher value diets. These conditions contributed to large and growing food deficits. Reviews of the agricultural situation generally concluded that growth opportunities still existed, particularly on the old lands of the Nile Valley and Delta, but that traditional crops and livestock enterprises were hampered by a number of factors. Among the more prominent obstacles to growth in production were low administered prices for some farm products and other regulatory constraints, lack of dissemination of existing technological information, lack of timely availability of production inputs (and credit to finance such inputs), emerging labor shortages and, in some instances, increasing soil salinity and rising water tables.

In 1978, experiment station information and experiences of progressive farmers indicated the nature of possible opportunities which might be exploited, even by the very small scale farm operations which characterize Egyptian agriculture. However, there was a dearth of information about what actually might take place on small farms if production constraints were relaxed. The Ministry of Agriculture and USAID carried out a study on whether (and how) removal of selected constraints might increase small farmer production and incomes.

The conclusion was to design and carry out a credit and agricultural development project through the Principal Bank for Development and Agricultural Credit (PBDAC). The PBDAC is the GOE institution for supporting agriculture and principally responsible for agricultural credit, some of it supplied in kind through the distribution of inputs, e.g., bulk fertilizers. The Bank is also responsible for a large portion of credit sales of improved seed, pesticides, herbicides and serves as depository of requisitioned crops. Hence the PBDAC, and a few viable cooperatives, are where the Egyptian farmer and the Government meet.

The key institutions for promoting new enterprises or agricultural development are the extension services working in connection with certain crop research institutes and the livestock production agencies and research institutes. These extension services generally operate under the direction of the provincial governments with technical direction from national offices. Typically, the extension services are overstuffed, underpaid, poorly trained, poorly supported and, therefore, relatively ineffective. This obviously limits the extent to which these services can assist farmers make good use of credit that PBDAC can make available to them.

Furthermore, PBDAC has its own serious difficulties in supporting traditional, to say nothing of new, productive enterprises. Under its normal operations, the bank has limits on how much fertilizer can be supplied, limits on loanable funds, stiff collateral requirements for loans, staffing limits, pay scale limits, and compulsory cropping patterns to which their borrowers must conform. Most importantly, there is a shortage of physical inputs for distribution, even when loanable funds are available. Feed, seed, breeding livestock, farm machinery, and occasionally fertilizer shortages exist, and plant protection material is not always available. In addition, the Bank is required to carry out business with an arbitrarily low interest rate structure for its loans. Low loan rates of interest, together with the relatively high transaction costs of dealing with small borrowers, hamper PBDAC's ability to attract deposits, tap the capital market or make profits on its farm loan accounts.

The Small Farmer Production Project therefore was designed to test - on a pilot basis - how farm production might be improved, through improvements in credit management and related, extension and input supply services. Specifically the project purpose was to:

"Develop and apply in three governorates an improved PBDAC credit and input system which would provide small farmers with access to agricultural inputs, including seed, fertilizer, cash, technological information and capital equipment".

The specific outputs listed in the logical framework matrix of the project were directed toward the PBDAC in the form of:

1. Improved bank management and administrative system.
2. Improved short and medium-term credit system.
3. Improved farm management/extension services.
4. Improved input storage and handling systems.
5. An upgraded training system.

The project seeks to develop and test improved ways of efficiently distributing productive credit to small farmers. Much as the design of an improved irrigation pump requires water to test its operation, so does this credit management improvement project require loan funds and support facilities to test improved designs. Beyond that; since the emphasis is on productive lending, the project must concern itself with both the financial and the economic viability of its loans and must demonstrate the viability of farming as a real claimant for scarce capital resources.

13

1. The project has provided credit and farming advice to 12,490 borrowers (as of 8/83), who to date have had a loan repayment record of 99.5% by date due and 100% collected. The credit has financed a wide array of farm activities and small scale agribusiness ventures which directly support the farming operations: several types of livestock enterprises, including broiler chickens, small scale egg production units, household-scale dairy cattle and water buffalo enterprises, as well as rabbit and bee-keeping activities. The project also has financed crop production - mainly wheat, lentils, broadbeans, cotton, garlic, onions, tomatoes and other vegetables. Loans to provide services to farmers also have been made. Thus, the project has financed custom machinery operators, nursery production of tomato seedlings, seed corn production, and small hatcheries, as well as small-scale agricultural processing and manufacturing activities. Many loans also finance small equipment purchases (pumps, sprayers, tractor-drawn implements, metal cages, etc).

2. To the general satisfaction of evaluators - both internal and external - the project has been successful in demonstrating that improved farm production and increased incomes can be achieved. The economic analysis shown in Annex 2 suggests that there is a very strong economic justification for continued AID and GOE support of this project. The joining of credit, extension, and an improved supply of production inputs holds great promise for future growth in Egyptian agriculture.

3. The project has demonstrated that, with the provision of an improved, profit-oriented credit system, small farmers will pay higher interest rates than the normal government-subsidized rates. This further suggests that farming operations may be able to bear even higher rates for selected activities which are profitable.

4. The project has demonstrated a new system of credit delivery, accounting and loan processing and analysis. This system would markedly improve the management of Village Banks and set standards for loan supervision throughout the PBDAC. It is now proposed to test the replicability of this system at the district bank level.

5. The project has demonstrated a highly effective system of information dissemination to Egyptian farmers by creating working relationships between subject matter specialists from the agricultural research institutes, field extension agents in the MOA and financial analysts in the Village Banks. It has generated useful insights on the roles of these individuals who constitute a "support team" for farmers under the project.

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6. The project also has gathered a considerable body of information on farm problems directly related to the management of credit flows to smallholder agriculture. These data include types of input problems faced by farmers, credit requirements and farmers' attitudes toward various suggested changes in their farming practices. The experience gained under the project will serve the institutional development objectives once analysis and recommendations for adoption are accepted by PBDAC for those program elements that are cost-effective and have a reasonable chance of being replicated on a regular operational basis. Much remains to be done on the analysis aspects of the project and constitutes an important part of the work under this amendment.

IV. Rationale For Project Amendment

A certain amount of work remains to be accomplished within the original terms of the project, mainly consolidation of the improved system at the district level, better analysis of the results of pilot operations and building construction. Although the grant agreement was signed July 25, 1979, the credit operation actually began only in May 1981, due to the usual delays in fielding a technical assistance contractor, and the time required to obtain approval of the new credit policies. The extension of PACD date under this Amendment to July 1986 - with field work phasing down in early 1986 - will actually give the project the 5 years of operating experience envisaged in the original pp.

On the basis of its experience to date in initiating improvements in credit management for productive agriculture, the project now seeks to formalize improved management practices in three complete Districts. Consolidation at the district (branch) level and continued operational experience will greatly enhance the credibility of the project in reforming the standard operating procedures of the only agricultural production-oriented credit institution in Egypt.

U.S. dollar support of this project: (a) shows a continued U.S. interest in direct assistance to small farmers; (b) enables the PBDAC to change levels of inputs allocations and local programs, secure exemptions from mandated cropping patterns, reduce loan collateral requirements and raise low, government-mandated interest rates; (c) in this last respect, permits the U.S. and the GOE to promote through a pilot project the wider dialogue on interest rate changes, and permits the PBDAC and GOE to develop confidence that interest rates can be raised without adversely affecting the performance of the credit system.

Furthermore, the project provides USAID with a working relationship with the PBDAC. Because it is the primary source of rural institutional credit in Egypt, the PBDAC will most likely remain a critical actor in agricultural development. With the delayed development of the Sector Assistance Support program, the SFFP project can continue to provide a bridge to future work with SAS and the PBDAC and any new projects which provide support to production campaigns that we must assume will be financed, in part, by PBDAC.

In a recent AID conference evaluating the agency's experience in irrigation projects, it was strongly recommended that AID finance "smart" projects - that is, projects which learned something during the course of their life span.

This project supplement is the result of such a learning process and comprises the following activities: consolidation of the decentralized loan program at the level of the district, the smallest administrative unit in which the new system must be tested before it can be replicated on a national scale; establishment of an external analysis unit to interpret the development implications of the pilot project; and completion of construction activities.

A. Improved Management and Credit System for Banking Districts.

The original project design called for an output of: "an Improved Bank Management and Administrative System in 27 Village Banks". The Village Banks were - and continue to be - the focus of operations.

1. Consolidation at the District Level

In the development of the improved management system AID and the SFPP staff determined that the supervising District Banks would have to be brought into the program in order to demonstrate that the new system is truly effective (See recommendation #1, Annex 3). The District is the smallest administrative unit at which level the improved credit system must be tested before it can be replicated on a national scale.

However, the decentralized loan program under the project permits village banks a great degree of autonomous loan authority, thereby by-passing the district bank. Exclusion of the supervising bank from the SFPP program resulted in the local Village Banks operating a different accounting system than their supervising entity. Furthermore, the original selection of Village Banks were deliberately scattered in three districts in three governorates in order to avoid bunching up of services. Achieving that objective left any given district with several banks in the program and several banks outside the program. The consequence was a district operating with parallel banking systems with different degrees of loan authority, different credit programs, different accounting systems, different input distribution and storage systems, different organizational structure; and different interest rate levels.

Inclusion of the district bank in the SFPP program will serve to consolidate the entire district under a unified and improved system. Consolidation of a district under the project on a pilot basis will serve to test and demonstrate how the unified system can function successfully to meet the credit needs of farmers across a district.

2. Improved Management Information and Accounting System

The external evaluation team recommended installation of the pilot system and general standardization of loan procedures (See Issue #4, Annex 3). The system is designed to provide all levels of bank management with a mechanism to rapidly store and retrieve client/loan data critical to improved bank management. This includes identification of borrowers, by type; projected profitability of farm enterprises; profitability of various banking operations; and generally improved accounting. The information collectively should enable the banks to increase their flow of services. This is particularly important in establishing a revolving line of credit to qualified borrowers which would enable the farmer to draw on this line without having to make a "loan application" every time some item is needed. Neither would the bank have to review and approve each single credit need once the line of credit has been approved. This will permit farmers to borrow small amounts of money on an "as-needed" basis throughout the cropping seasons with far less paperwork and processing time.

It is clear that installation of the management information system can also effectively enhance the amount of loanable funds. This would be significant in serving the large number of very small farmers for whom a crop loan of only LE 100 can trigger the use of improved technology and a higher annual income.

3. Increased Credit Requirements

The additional credit requirements under the proposed supplement are determined by the consolidation of 22 Village Banks in three districts into a unified improved credit system. Currently, half (eleven) of the Village Banks in the three districts are under the project. Consolidation will increase credit requirements because eleven new VBS will be added. Furthermore, new credit funds will be required to demonstrate that the improved information management system, to be installed in the 22 VBS and three district banks, will facilitate the handling of both larger numbers of loans and larger numbers of farmers. Installation of the management information system will also facilitate the establishment of revolving lines of credit for farmers.

The AID contribution to the loan fund under this amendment will be LE 10.0 million. LE 6.0 million will be utilized to bring the eleven new Village Banks into the program at current lending levels. Another LE 4.0 million will be utilized across the entire 38-VB project area, primarily for the establishment of revolving lines of credit for seasonal (short-term) crop loans.

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The GOE contribution to the loan fund will be to shift approximately LE 10.0 million of its Village Bank portfolio (about 60%) in the 22-VB consolidation area to the SFPP program. This amount currently is lent out at subsidized interest rates in the 6-7% range under a prescriptive lending program. Under the SFPP program, these monies will be lent out at 10 percent until 5/84 and 14 percent thereafter (a 40% increase). Furthermore, these monies will be lent according to the SFPP system: loan analysis procedures based upon profitability; fewer collateral restrictions; inputs sold to farmers at free market prices; a streamlined accounting system that stresses management information rather than control; and faster loan processing and approval.

The AID/GOE LE 13.1 million loan fund under the current project is sufficient to reach about 27,000 farmers, or about twenty percent of the 124,000 Village Bank clients in the original 27-VB project area, by 12/86 (six months after the new PACD).

The new LE 20.0 million loan fund provided under this amendment may be expected to reach about 58,000 farmers of the total 181,000 farmer clientele, including the 57,000 new farmers in the 11-VB area to be added to the project under this amendment.

<u>Source</u>	<u>Amount AID/GOE loan fund (LE 000)</u>	<u>No. Farmers reached by 12/86</u>	<u>No. Farmers in project area</u>
current project	13.1	27,000	124,000
amendment	20.0	58,000	57,000
TOTAL	33.1	85,000	181,000 (46%)

The total loan fund under the original and amended project (LE 33.1 million), with reflows, will be sufficient to reach about half of the 181,000 farmers in the project area by 12/86. The majority of loans to these farmers will be small seasonal crop loans averaging LE 100.

Combined with PBDAC funds, the total loan fund under the original and amended project provides LE 1.2 million to each of the 38 Village Banks in the expanded project area. Current estimates put the amount of loan funds required to meet farmer needs at about LE 2.8 million per Village Bank, over twice the amount provided under this project.

Loan fund requirements and loan activities under the current project and proposed amendment are discussed further in Annex 1.

B. Improved Analysis of The Developmental Implications of the Project

As one of the external evaluators phrased the issue, the Small Farmer Project "has been so busy successfully making tracks that it has failed somewhat to keep track."

Although implicit in any pilot project, the original project paper did not highlight the need for detailed analysis of developmental implications of the project. Accordingly, sufficient personnel and other resources were not provided to this critical aspect of the project. The project operations in improved credit procedures, input availability and farm advisory services and the resultant increases in agricultural productivity have generated a wealth of developmental information that has not been systematically analysed or interpreted.

It is therefore proposed that this situation be addressed in the project supplement in the following manner. As the project management and technical staff are fully occupied with the demands of implementing the new credit, input and advisory services, the monitoring and analysis component of the project will be performed by an outside contractor or sub-contractor.

The work to be done will consist of three main components:

(a) Follow up study of the baseline measurements to determine farmer's perspective on project interventions and remaining farm problems

(b) Evaluation of project and non-project agricultural credit and input flows, and determination of the optimal mix of inputs (extension, bank management, credit and physical inputs) necessary and sufficient to increase farm productivity, including:

1. The degree to which farm productivity improvements are dependent upon provision of financial capital, and which enterprises are more capital dependent and which are more capable of "self-financing".
2. The degree to which improvements are a function of merely ensuring that the various physical inputs are available to farmers.
3. The degree to which improvements are a function of the availability and quality of extension assistance.

(c) Review of the project costs (equipment, training, salary incentives, etc.) and results of using Village Bank financial analysts, farm management and subject matter specialists. The costs and returns will be studied in contrast to other credit and development programs of PBDAC - i.e., food security loans and other crop production programs.

The project analysis component will provide recommendations for additional development programs - either for "project" type replication or regional or national programs. Drawing from project experience, the analysis will address the costs and benefits of developing and/or improving opportunities for self-sustaining credit programs, training requirements for staff, alternative modes of providing critical information services to farmers and, most importantly, how physical inputs can be supplied in adequate amounts, types and timeliness.

The analysis component of the project can be performed primarily from existing data, though some primary data collection may be necessary. The analysis team is expected to rely to the extent possible on the data available from ACDI and the PBDAC in their project records. Analysis will be coordinated with the work of the project, so that lessons learned from the analysis can be applied to project work in as timely a manner as possible.

C. Completion of Construction

For reasons detailed below, the funds budgeted for construction remained essentially intact. The reason construction has fallen behind schedule is because it was decided (before actual construction began) to construct new buildings rather than renovate existing buildings. In August, 1980, the SFPP grant agreement was amended to authorize "construction or renovation" rather than renovation alone. The PBDAC opted for construction of new banks and warehouses because of the difficulties encountered with renovation. USAID-funded construction components in other projects (such as Urban Health 0065) which include renovation activities have had similar difficulties.

It was decided to construct new storage facilities rather than renovate existing rented facilities because: (1) the construction standards originally envisaged fell far below actual requirements. Funds had been provided for open storage or roofed sheds. However, project experience has shown that open or roofed storage without vermin-proof walls is not practical for grain storage nor recommended for fertilizer storage; (2) the existing facilities were not adequate in size to provide for the principal objective of the storage and transportation component as outlined in the Project Paper; i.e., to be able to receive truck and trailer loads of fertilizer direct from the factory thus avoiding extra handling, and to store a six months supply of fertilizer at the village so that there would always be enough on hand for peak demands; (3) each building to be renovated is different from every other building requiring constant redesign and revision of cost estimates; and (4) current rental arrangements are inadequate, since the Village Banks are renting storage space not designed for grain and fertilizer storage, and since the banks are unwilling to carry out extensive renovations on rental property.

It was decided to construct new Village Banks rather than renovate existing buildings because: (1) some of the bank buildings are simply too small and not worth renovation; (2) some are very old and do not permit extensive renovation (plumbing, wiring) without great expense; (3) some of the buildings used by Village Banks are rented but cannot be purchased - new buildings are necessary if the bank is to own its facilities; and (4) a good, functional set of buildings is in keeping with the project purpose of building credibility between the bank and its clients.

The warehouse construction component proposed in this project amendment will be treated as a loan, within the PEDAC system. The PEDAC will loan funds to the Governorate Banks who in turn will work out arrangements with Village Banks and Agencies to recover the major costs of construction from end users. The recovered funds will go into the loanable funds account of the borrowing Governorate Banks. The purpose of this procedure is threefold. First to retain as much capital as possible for farm loans, secondly, to encourage business-like management of funds through borrowing by users and cost recovery practices and thirdly, to reduce the competitive advantage the public sector would have over the private sector if grant funds are provided for warehousing. As the warehouse loan aspect was added at the final stages of project amendment design, the operational details of this component are still to be refined. No funds will be expended until such details are worked out to the satisfaction of USAID and the GOE. Cost estimates are firm and adequately estimated (See Section VI page 21).

V. Financial Plan

Proposed AID funding for this amendment is \$24.0 million, matched by a GOE contribution of LE 13.089 million. The original Project Paper budget for \$25.0 million is presented in Table I. AID cost estimates for this amendment are presented in Tables 2 to 4, but differ from the original Project Paper format to reflect computation of contingency and inflation by line item, grouping of Village Bank and storage facility construction costs, and the addition of new line items for the computerized Management Information System and the Evaluation/Analysis components. Physical contingency and inflation for all line items comprise ten percent of total estimated costs (See Table 3). GOE staff costs have been presented separately in Table 5. The following is a brief discussion of estimated costs by line item.

A. AID Costs

1. Technical Assistance

The current level of U.S. technical assistance remain unchanged through the life of project (9 resident technicians, six of whom are permanently posted in the field). Detailed cost estimates for technical assistance are presented in Annex Table 10.1.

2. Training

The amount of LE 155,000 has been allocated for in-country training of 190 extension agents and Village Bank personnel (Annex Table 10.4). Another \$200,000 has been earmarked for short-term training in the U.S. for 66 participants, but has been included in the technical assistance line item as part of the U.S. contractor's management services (Annex Table 10.1). The Management Information System line item also includes LE 171,000 allocated for in-country training in data processing (Annex Table 10.3).

In-country training for extension agents is comprised primarily of courses on mechanization, crop packages, fertilization, weed control, use of small equipment, etc. For bank personnel, it is comprised of courses on loan procedures and processing, and accounting management. Short-term U.S. participant training is comprised of consultation with the USDA, agricultural research departments of universities and state extension services, and farm credit banks.

3. Loan Funds

Annex 1 describes in detail the estimated credit requirements for consolidation of the three-district area into one unified banking and credit system. Loan funds are derived from two sources: AID grant assistance in dollars (\$12 million) equaling LE 10 million and an Egyptian contribution of LE 10 million. All loan funds will be lent out according to the non-prescriptive SFPP system at interest rates approaching the market rate.

4. Project Construction

To meet its commitments under the existing Project Agreement and subsequent Amendments, the amount of LE 6.8 million available for construction in the ongoing project is increased to LE 13.45 million under this Amendment. For the work in Village Banks, a total of about \$440,000 was originally budgeted (see Table 1). With current cost estimates, this level of financing would build only two Banks. The original Project feasibility study used a cost estimate figure of LE 40/square meter for renovation of storage facilities which apparently was used as the basis of the project budget. The A&E firm now estimates the costs to be about LE 300 per square meter for the new type Village Banks so the LE 40 for warehouses is not relevant for estimating total construction costs.^{1/} With funds presently allocated from the contingency and inflation line items and original budget items, the plan now is to contract for 15 Village Banks and about 76 warehouses under the current project. The supplement will finance the construction of the remaining 12 Village Banks and 55 warehouses under the add-on provisions of the same construction contract. Latest cost estimates by the A&E firm are presented in Annex Table 10.2. No new construction is planned for the 11-Village Bank area to be added under this amendment to the original 27-Village Bank project area.

^{1/} The currently proposed construction component for both the Village Banks and Agency warehouses is different in concept than that in the original Project Paper. The original PP contemplated remodeling and refurbishing Village Banks and either refurbishing or construction of four post, roofed, open-sided shelters for fertilizer. During the initial phase of project implementation, it was agreed to finance new construction of both banks and warehouses. Hence, the marked change in cost estimates for the project's construction components. These changes in construction concepts had been agreed to in grant agreement amendments and subsequent implementation letters. The present cost estimates have been prepared by a competent A&E firm and have been reviewed by AID engineers and other appropriate staff. The adequacy of the cost estimates are also agreed to in this paper's 611a certification.

5. Farm Management Extension and Team Support

The Farm Management Extension item refers to: (a) farm equipment purchased under the project which has been tested elsewhere and proven to be successful under Egyptian conditions and which is demonstrated to potential borrowers in the project area; and (b) local contracts with individuals or institutions to provide technical advice to farmers and extension agents. The Team Support item includes furniture and office equipment for Village Banks, equipment for the central Project Office, local contracts and in-country transportation (See Annex Table 10.4).

6. Management Improvement System

This item provides for the (Arabic-language) computerization of the loan processing and accounting system in the 22 Village Banks to be consolidated, including in-country training of Village Bank staff in the use of the equipment. Annex table 10.3 presents a detailed cost estimate for this component.

7. Evaluation and Analysis

Two hundred ninety thousand dollars have been identified as needed for the monitoring and analysis of the project. The cost estimate is based upon doing the follow up study of the baseline measurements and a series of about 10 interrelated special studies. U.S. technical assistance is programmed on an intermittent basis, primarily under the technical assistance line item (ACDI Contract) but with non-contract funds also available as needed. Final cost estimates will be determined as contracts are negotiated with the studies contractor. Another \$70,000 has been budgeted for the final outside evaluation (see Evaluation Plan).

B. GOE Costs

To date, the GOE has spent LE 8 million on the project, nearly reaching the amount originally committed in the project agreement (Tables 1 and 5). Of this, almost LE 5.0 million has helped fund the credit component and another L.E. two million went for land purchased for the construction of the storage facilities. Under this amendment, another LE 10 million will be committed as a counterpart contribution to the credit fund, as well as LE 2.1 million to finance one-half of the construction costs for nine Village Banks and another million LE to meet increased staffing costs. Total GOE contribution is LE 13.089 million. GOE operating costs by Village Bank are detailed in Annex Table 10.5.

Table 1
Summary AID and GOF Cost Estimates
and Financial Plan
Original Project Agreement
 (US \$ 000)

Source	AID		TOTAL	GOF LE	TOTAL	%
	\$	LE-eq				
<u>Use</u>						
Technical Assistance	4176	702	4878	-	4878	21.7
Training	181	85	266	-	266	1.2
Loan Funds	-	7875	7875	4500	12375	55.0
Storage	337	2652	2989	23	3012	13.4
Farm Management Extension	54	10	64	50	114	.5
Building Renovation	155	108	263	177	440	2.0
Team Support and Evaluation	114	150	264	338	602	2.6
OE Staff	-	-	-	814	814	3.6
Subtotal	5017	11582	16599	5902	22501	100.0
Contingency (15%)	1099	556	1655	210	1865	8.3
Inflation	1181	5565	6746	2719	9465	42.1
TOTAL	7297	17703	25000	8831	33831	150.4

Table 2
Summary AID Cost Estimates
and Financial Plan
(000)

<u>Use</u>	<u>Project Agreement as Amended 12/83</u>			<u>Proposed this Amendment</u>			<u>Grand Total</u>
	<u>\$</u>	<u>LE-eq.</u>	<u>Total</u>	<u>\$</u>	<u>LE-eq.</u>	<u>Total</u>	
Technical Assistance	4,176	1,100	5,276	1,600	637	2,237	7,513
Training	433	357	790	-	155	155	945
Loan Funds	1,200	8,932	10,132	-	12,000	12,000	22,132
Construction VB + Storage	-	6,800	6,800	-	6,650	6,650	13,450
Farm Management	99	851	950	-	895	895	1,845
Team Support	359	693	1,052	-	765	765	1,817
MIS	-	-	-	600	338	938	938
Eval. & Analysis	-	-	-	70	290	360	360
TOTAL	6,267	18,733	25,000	2,270	21,730	24,000	49,000

Table 3

Summary Planned AID Dollar Expenditures
(000 US \$ and LE eq)

	<u>Base</u>	<u>Cont.</u>	<u>Base + Cont.</u>	<u>Inf.</u>	<u>Total</u>
TA	1,883 <u>1/</u>	189	2,072	165	2237
Training	120 <u>2/</u>	12	132	23	155
Loan Funds	12,000 <u>3/</u>	-	-	-	12,000
Construction	5,187 <u>4/</u>	599	5,786	864	6,650
Farm Mgt. Extension	700 <u>5/</u>	70	770	125	895
Team Support	600 <u>5/</u>	60	660	105	765
MIS	793 <u>6/</u>	80	873	65	938
Eval. & Analysis	300 <u>7/</u>	30	330	30	360
	21,583	1,040		1,377	24,000

Source of estimates for physical contingency and inflation is Table 4, which which presents year-by-year expenditure estimates.

Sources for Base Cost estimates:

1/ Annex Table 10.1

2/ In-country training costs (Annex Table 10.4).

3/ See Annex 1 for detailed explanation of credit fund requirements.

4/ Construction costs in LE of village agencies and one-half Village Banks from Annex Table 10.2 converted to LE equivalent (dollars of LE).

5/ Annex Table 10.4.

6/ Annex Table 10.3

7/ Annex Table 10.4.

Table 4
Planned Annual All Dollar Expenditures Showing
Physical Contingency and Inflation
 (000 US \$ and LE eq.)

	1984					1985					1986				
	Base	Cont.	Base + Cont.	Inf.	Total	Base	Cont.	Base + Cont.	Inf.	Total	Base	Cont.	Base + Cont.	Inf.	Total
T.A.	628	63	691	55	746	628	63	691	55	746	627	63	690	55	746
Training	60	6	66	10	76	50	5	55	11	66	10	1	11	2	13
Loan Funds	5,400	-	-	-	5,400	6,600	-	-	-	6,600	-	-	-	-	-
Construction	2,593	300	2,893	432	3,325	2,594	299	2,893	432	3,325	-	-	-	-	-
Farm Mgt. Ext.	400	40	440	70	510	250	25	275	45	320	-	-	-	-	-
Team Sup.	200	20	220	35	255	300	30	330	50	380	50	5	55	10	65
M I.S.	396	40	436	35	471	297	30	327	22	349	100	10	110	20	130
Eval. & Anal.	150	15	165	15	180	100	10	110	10	120	100	10	110	8	118
	9,827	484	-	652	10,963	10,819	462	-	625	11,906	937	94	-	100	1,131

Note: Ten percent physical contingency for all dollar and LE-equivalent costs, except local construction which has been estimated at twelve percent. Fifteen percent inflation for all items except TA and Management Information System for which the U.S. inflation rate of eight percent was utilized because these are predominately dollar cost items. No physical contingency or inflation applied to credit funds. Based upon guidelines set out in State O15265 and J. LaPittus, "Treatment of Contingency Allowances in Project Papers," DPPE/USAID/Cairo, February 15, 1983.

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Table 5
Summary GOE Contribution
To Project
(000 LE)

	<u>Original Project</u>	<u>Actual, as of 12/83</u>	<u>Proposed this Amendment</u>	<u>Total</u>
Technical Assistance	-	-	-	-
Training	-	-	-	-
Loan Funds	4,500	4,830	10,000	14,830
Construction	200	2,000 <u>1/</u>	2,108 <u>2/</u>	4,108
Farm Mgt./Extension	50	50	<u>3/</u>	50
Team Support	338	338	<u>3/</u>	338
.I.S.	-	-	-	-
Evaluation/Analysis	-	-	-	-
GOE Staff	<u>814</u>	<u>814</u>	<u>981</u> <u>4/</u>	<u>1,795</u>
TOTAL	5,902	8,032	13,089	21,121

1/ Land purchase for storage facilities.

2/ GOE share (1/2) of Village Bank Construction.

3/ included in GOE Staff.

4/ Drawn from Annex Table 10.5. Incentive payments for ordinary personnel plus salaries and incentives for added personnel, for 38 VBs over two-year period (6/84-6/86).

VI. Implementation Schedule:

Implementation of the project will follow already established procedures for bringing new banks into the program, and the training and equipping of bank staff. Training for Village Bank teams (bank staff and MOA extension agents) in the eleven new Village Banks to be added under this amendment has already begun. The main program elements to be carried out during the remaining life of the project are scheduled as follows:

A. Increased Credit Operations:

Consolidation of the branch banks at current lending levels will increase the number of households served by the project by 50 percent, and demonstration of the improved management information and accounting system and establishment of revolving lines of credit for crop loans will require a doubling of current lending levels. Because of the momentum gained in implementation of the improved system, almost half of the AID/GOE credit funds allotted for this amendment can be moved into the SFPP system by early 1984.

Expanded lending operations will begin immediately upon signature of the project agreement amendment (assumed to be 3/84). By then, the eleven new VBS in the 22-VB area to be consolidated will be ready to receive a capital fund of approximately LE 500,000 each (1/2 AID funds, 1/2 PBDAC funds). Another LE 150,000 of PBDAC/AID funds will be made immediately available for lending in each of the eleven "old" VBS in those districts. Approximately LE 50,000 of AID funds will also be made immediately available for lending in the 16 "old" VBS, primarily for the establishment of revolving lines of credit for crop loans (See Annex 1). Total PBDAC/AID disbursement of loan funds will be approximately LE 7.95 million by 3/84. The scheduled disbursements of the remaining loan funds to the SFPP loan account are presented in Table 6.

B. Village Bank and Warehouse Construction

Final plans and cost estimates for the construction program were approved by USAID in October, 1983. Construction bids for the first group of buildings will be opened late January, and work will begin soon. The A&E firm, PBSabour, has been retained to do the construction management, thus the entire program of 27 new villages banks and 131 warehouses is ready to move forward. The construction IFB was drafted to show the planned contract as including the entire set of buildings contemplated so it will not be necessary to let new contracts when additional funds become available under this amendment to complete the entire effort. If construction bids should come in at base cost estimates then it is proposed to move the amount of base cost adjustment to the loan fund line item. The construction schedule is shown in Table 7.

C. Management Information System (MIS)

All of the studies on the MIS for village bank operations have been completed except the details of the input handling operations; this study is underway. In the meantime, specification on bid documents are being prepared to show what is expected of the new management system, what functions the village banks perform, their present operating procedures, accounting systems and generally just what "raw material" input the new system will need to handle to generate a specified level of new information and in what form the information is to be presented. The main action items of this project component are presented in Table 8.

D. Analysis of the Development Implications of the Project

Discussions are currently underway between the Project Director and the Head of Agricultural Economics Department of Zagazig University with respect to the University's undertaking a leadership role in organizing a series of studies designed to address the degree to which various elements provided under the project are critical for improving farm productivity. The initial planning is for Zagazig University - which also has a branch in Qalubia - to join with Assiut University to carry out the evaluation and analysis. The process of implementation would be for the GOE, AID and Project staff to outline the issues which they would like addressed and seek a proposal from the University contractors on how they would address the issues AID and the GOE identified, as well as any which the Universities themselves feel are critical.

The schedule is to conclude discussions and asking for proposals by 3/84 and award the initial study contract in the second quarter of 1984, with additional studies and analysis done as warranted through the life of the project. USAID/Cairo would participate fully in the identification of issues, study design and review of findings.

VII. Evaluation Plan

The SFPP was evaluated in February, 1983. The findings of this evaluation have served as the basis for the current amendment. Since one of the major findings of the 1983 evaluation was that the project's progress was not documented sufficiently, this amendment emphasizes improved monitoring and analysis as an integral part of on-going project activities (as outlined in Section IV.B.). This new monitoring and analysis component will be a continuous activity for the remaining life of project.

Table 6
Schedule for Disbursement of
Credit Funds
(LE)

Date Source	3 mo. after obligation		6 mo. after obligation		12 mo. after obligation		Total		
	<u>AID</u>	<u>PBDAC</u>	<u>AID</u>	<u>PBDAC</u>	<u>AID</u>	<u>PBDAC</u>	<u>AID</u>	<u>PBDAC</u>	
Assiut Branch									
New VBs	3	750	750	450	315	450	300	1,650	1,365
Old VBs	3	150	300	150	530	150	535	450	1,365
Sub-total		<u>900</u>	<u>1,050</u>	<u>600</u>	<u>845</u>	<u>600</u>	<u>835</u>	<u>2,100</u>	<u>2,730</u>
Toukh Branch									
New VBs	4	1,000	1,000	600	400	600	400	2,200	1,800
Old VBs	5	250	500	250	875	250	875	750	2,250
Sub-total		<u>1,250</u>	<u>1,500</u>	<u>850</u>	<u>1,275</u>	<u>850</u>	<u>1,275</u>	<u>2,950</u>	<u>4,050</u>
Zagazig Branch									
New VBs	4	1,000	1,000	600	400	550	455	2,150	1,855
Old VBs	3	150	300	150	530	150	535	450	1,365
Sub-total		<u>1,150</u>	<u>1,300</u>	<u>750</u>	<u>930</u>	<u>700</u>	<u>990</u>	<u>2,600</u>	<u>3,220</u>
Total 22-VB Area to be Consolidated									
New VB	11	2,750	2,750	1,650	1,115	1,600	1,155	6,000	5,020
Old VB	11	550	1,100	550	1,935	550	1,945	1,650	4,980
Sub-total		<u>3,300</u>	<u>3,850</u>	<u>2,200</u>	<u>3,050</u>	<u>2,150</u>	<u>3,100</u>	<u>7,650</u>	<u>10,000</u>
Other VIs	16	800	-	800	-	750		2,350	-
GRAND TOTAL	38	4,100	3,850	3,000	3,050	2,900	3,100	10,000	10,000

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Table 7

Construction Schedule

<u>Event and Source of Funds</u>	<u>Date</u>
<u>From Existing Project</u>	
Approval of A&E plans and cost estimates	10/83
Approval of IFB	11/83
Publish IFB	11/83
Receipt of Bids	1/84
Review of Bids	2/84
Award Contract	4/84
Construction Begins	5/84
<u>From Supplemental Funds</u>	
Approval of balance of construction and fund additional level of effort in original contracts	5/84
All construction completed	1/86

Table 8

Implementation Schedule for Introducing the
Management Information System

<u>Activity</u>	<u>Date</u>
Basic feasibility study completed for accounting/savings	10/83
Detailed Study contracted for input handling	11/83
Detailed Study completed for inputs	6/84
Training Planning begun	12/83
Training Planning completed	8/84
Draft Bid Documents	2/84
Review Bid Documents	3/84
Approve Bid Documents	5/84
Publish Bids	6/84
Review bids	8/84
Award Contracts	9/84
Train Staff	10/84
Install Systems	12/84
Additional Training	12/84
Begin System Operation	1/85

At the completion of the project in the second quarter of FY 86, a final evaluation will be performed to assess the overall impact of the project. This final evaluation will be expected to draw heavily on the monitoring information gathered as a part of the project but, in addition, it will need to document: (1) the changes in project impact brought about as a result of the implementation changes (including the monitoring and analysis component) included in this amendment; (2) the effects of the broader agricultural and economic setting (e.g., GOE pricing and cropping policies on project progress and impact; (3) the extent of overall success in establishing an optimal, replicable and cost-effective package of agricultural inputs; (4) what the longer term benefits (and beneficiaries) of overall project success are; and (5) what lessons AID can learn as a result of the project's experience and overall impact.

A team comparable in size and skills to that performing the 1983 evaluation will be used. This amendment includes \$70,000 for this purpose.

VIII Covenants and Conditions Precedent

Three new covenants and no new conditions precedent will be required in the Amendment to the Grant Agreement to be negotiated following amendment of the Project Authorization.

The first new covenant shall require that all Project loans made after May 1, 1984 shall be at a rate of 14% or at the prevailing rate, whichever is higher.

The second new covenant shall require that all Project-loan funds (and not just short-term funds) shall be kept in a revolving fund at the Village Bank level, and that repayments of loans made to farmers under the credit component of the project shall be placed in the same revolving fund and be available for reloan to farmers, except as described below.

The Grant Agreement already stipulates that loan funds provided under the Grant not be used to amortize the debts of the PBDAC or the Governorate level banks of the PBDAC system. However, an objective of this project is to promote fiscal responsibility and autonomy at the Village Bank level, to permit the Village Banks to become viable, self-financing rural credit banks. Therefore, the third covenant to the Grant Agreement Amendment will state specifically that up to one-third of the interest collected by a Village Bank on all Project loans may be used to finance the added Village Bank administrative and operating costs of the SFPP program. This covenant is a major step by which the project may become self-financing over time.

IX Updated IEE

The original Initial Environmental Evaluation (IEE) for this project recommended a negative determination, i.e., that the project would have little or no detrimental impact upon the environment. The project Grant agreement excludes the use of project funds for purchase of pesticides. None have been purchased with project funds to date. There are no changes to the scope and impact of the project in this amendment. Therefore, it is recommended that a negative recommendation be retained for this amendment.

X 611(e) CERTIFICATION

Small Farmer Production Project

Project 263-0079

I, Arthur M. Handly, Deputy Director of USAID/Cairo, having taken into account, among other things, the maintenance and utilization of projects in Egypt previously financed or assisted by the United States, do hereby certify that in my judgement, Egypt has both the financial capability and human resources capability to effectively maintain and utilize the capital assistance to be provided for construction and renovation of banks and warehouses under the Small Farmer Production Project in Egypt.

signed per Cairo 09326

Arthur M. Handly

25 March, 1984

(Date)

Annex 1

Credit Fund Requirements for Proposed Amendment

A. Current Program

Despite a slow beginning, the SFPP program has made excellent progress in loan processing, disbursement and collection. Number of loans disbursed per year went from 0 in 1980 to 6,900 in the first three quarters of 1983, bringing total loans made to about 12,500 ^{1/}. These loans have financed a wide array of farm enterprises (Table I.4). Repayment of all loans has been 99.5 per cent on schedule with later recovery of 100 per cent (the national loan recovery rate of all the Village Banks in the PBDAC system reached 96.3% in 1981).

These loans were made with an original capital fund of about LE 7.6 million disbursed to the SFPP account by AID and the GOE since inception of the project. Another LE 5.5 million remain to be lent out over the life of project and will be disbursed to the SFPP account by 3/84. The total AID/GOE capital fund provided under the original project is LE 13.1 million.

The project now averages 1,000 loans per month, which will increase to 1,200 over the next two years. This rate can be expected to increase to more than 3,000 per month under the proposed amendment, as a result of: increased credit funds; installation of the client/loan data management system; application of a uniform credit delivery system across three branch areas; and establishment of revolving lines of credit for seasonal crop loans.

Total loans made from the LE 13.1 million and its reflows until 12/86 (six months after the proposed PACD) have been estimated in Table 1.2. By 12/86, the project will have made about 52,000 loans, reaching approximately 27,000 farmers, comprising a little over a fifth of the 124,000 Village Bank clients in the original 27-VB project area.

Until very recently, the mix of loans (by volume of credit funds) provided to farmers under the SFPP program has been oriented primarily towards medium-term credit. Under the traditional PBDAC program, the average-size medium-term loan is in excess of LE 38,000 and reaches a very small handful of large farmers. Under the current SFPP program, the average-sized medium-term loan is LE 1,100, reaching many times more farmers (See Table 1.2). About a fourth of the approximately 52,000 loans disbursed by 12/86 are medium-term loans, representing almost half the volume of credit funds. Another half of the loans are small, seasonal (short-term) crop production loans to the same farmer for the November-April and May-October growing seasons. Under the current SFPP program, crop loans only represent less than five percent of the volume of credit funds.

^{1/} This figure is over 16,000 loans (about 12,000 farmers) as of December, 1983, totalling LE 15.0 million.

B. Proposed Program

Based upon its perceptions of farmer needs, the SFPP staff has proposed that a larger proportion of AID/GOE capital funds provided under this amendment be allocated to seasonal crop loans. The proposed program will continue the emphasis on medium-term credit (about half of volume), but will provide a substantially larger volume of credit monies (from about four percent to as high as 20 percent) for seasonal crop loans. Besides the current range of crop activities (primarily grain and vegetable crops), the SFPP staff intend to move a portion of its crop loan portfolio towards farmers with established citrus orchards. These farmers want loans which average LE 150-300 for fertilization, pruning, weed control, etc. The volume of capital funds for non-crop short-term loans is expected to decrease somewhat (to 30 per cent) under the proposed amendment, although a greater number of smaller loans will be offered, mostly for production of eggs.

The majority of new credit funds proposed in this project amendment will be allocated to the three banking districts (branches) to be consolidated under the SFPP program. These are the Assiut, Toukh and Zagazig banking districts, comprised of 22 Village Banks and about 110,000 farmer borrowers. One half (eleven) of these 22 Village Banks are already under the SFPP program (See Table 1.6). Consolidation will require that eleven new Village Banks be brought into the project, which will bring the total number of Village Banks in the project from the original 27 to 38, and the total number of Village Bank clients in the project area from 124,000 to 181,000. This latter number represents about a third of the total number of Village Banks and farmers in the three governorates in which the project area is located.

Under this amendment, it is intended that the PBDAC place LE 10.0 million into the SFPP account for utilization in the 22-VB consolidated area. This LE 10.0 million represents about 60 per cent of the LE 16.0 million PBDAC portfolio in the 22-VB area, and is utilized for all loans except crops. Under this amendment, the PBDAC has agreed to lend out the LE 10.0 million to farmers at SFPP interest rates. The subsidized interest rate for crop loans, made with the remaining LE 6.5 million (or 40 per cent) of current portfolio, is a highly sensitive political issue. The PBDAC is yet unable to withdraw this remaining LE 6.5 million from its current portfolio for lending at SFPP interest rates.

The LE 10.0 million currently is lent out at an average interest rate of seven percent (See Table 1.5). Under the SFPP system, these funds will be lent at 10 percent until 5/84, and 14 percent thereafter. Furthermore, these monies will be lent according to the SFPP system: less collateral restrictions; loan analysis procedures based upon financial viability; a streamlined accounting system that stresses management information rather than control; and faster loan processing and approval.

It will also be necessary under this amendment to bring the eleven new Village Banks into the SFPP program in order to consolidate the 22-VB area. The eleven new villages have about 57,000 farms, increasing the total potential farmer-borrowers in the original project area (124,000) by close to 50 percent. Establishing a capital fund for the eleven new villages that could operate at the same level as the original fund would require about LE 6.0 million, or about half of the original AID/GOE capital fund of 13.1 million.

This brings the total new capital fund to LE 16.0 million. Since its counterpart contribution to the SFPP program is LE 10.0 million, AID will add another LE 4.0 million in additional capital funds, bringing the total new capital fund to LE 20.0 million under this amendment (Table 1.1). The LE 4.0 million will be utilized primarily for establishment of revolving lines of credit for seasonal crop loans.

On a global basis, the LE 13.1 million credit fund in the original project, plus the LE 20.0 million provided by AID and the GOE in this amendment, provide a total of LE 33.1 million in credit funds to the 38-VB project area. This is about LE 870,000 per bank. Adding this amount to the LE 300,000 available to lend out by each bank in subsidized crop loans brings the total to LE 1.2 million capital funds per Village Bank in the 38-VB project area. SFPP project staff have estimated that to meet farmer demand for (particularly medium-term) credit in the project area would require that each Village Bank be capitalized at LE 2.8 million. Thus, the original and amended project meets almost half of estimated credit demand in the 181,000-farmer area.

Total farmer-borrowers reached by 12/86 under this amendment are estimated at 58,000 (Table 1.2), half of whom take out seasonal crop loans averaging LE 100 each. Added to the estimated number of borrowers (27,000) reached by the original project, the LE 33.1 combined capital fund will provide loans to about 85,000 farmers, or almost half of the 181,000 farmers in the project area.

The above estimates of loans made and farmers reached are based upon the following assumptions: (1) Funding for the proposed amendment is obligated by 3/84, permitting credit funds to be moved to the SFPP account soon thereafter (See Implementation Schedule in text); (2) The rapid momentum achieved to date under the project continues; (3) The project maintains the schedule for training additional Village Bank, extension and other staff for the expanded lending operations in the 22-VB area to be consolidated (training for the new Village Bank teams has already begun); (4) the Management Information System is installed and operating with trained staff in the 22-VB consolidated area by 12/84; (5) Revolving lines of credit for seasonal crop loans will be established in the Village Banks under the SFPP program by 12/84.

Annex Table 1.1Capital Fund Requirements
For Proposed Amendment
(LE 000)

A. Current Capital Fund Levels in 3-Branch Area (22 VBs)	
<u>PBDAC 1/</u>	
-subsidized crop loans	6,500
- all other loans	<u>10,000</u>
Subtotal	16,500
<u>SFPP 2/</u>	
- current level in 11 VBs of 3-Branch Area	6,000
<hr/>	
B. Requirements for this Amendment in 3 Branch Area	
<u>PBDAC 1/</u>	
- current level for all loans except crops	10,000
<u>SFPP 2/</u>	
- additional funds for 11 new VBs	<u>6,000</u>
Subtotal	16,000
C. Additional Requirements Total Project Area (38 VBs)	4,000
Total Supplement	20,000

1/ Figures drawn from Annex Table 1.5 (LE 295,361 for crops and 445,853 for all other) multiplied by 22 VBs and rounded.

2/ Estimated on basis of current project which serves 124,000 farmers with a capital fund of LE 13.1 million. The new 11-VB area has 57,000, or 50%, more farmers, therefore requiring 50% more loan funds.

Annex Table 1.2

PBDAC and SFPP: Average
Loan Size, Estimated Number of Loans and
Number of Farmer Borrowers in Current and Proposed Programs

	<u>Short-Term Crop</u>	<u>Short Term Other</u>	<u>Medium Term</u>	<u>Average or Total</u>
Current PBDAC Portfolio (38-VB Area) <u>1/</u>				
Av. Size Loan (LE)	70	3,500	38,500	108
No. Loans	205,600	2,500	270	208,000
No. Farmer Borrowers	165,700	1,400	270	167,100
Current SFPP Program (27-VB Area) <u>2/</u>				
Av. Size (LE)	75	1,800	1,100	690
No. loans (by 12/86)	27,900	10,100	14,000	52,000
No. Farmer Borrowers	6,200	6,600	14,000	26,800
Proposed This Amendment (38-VB Area) <u>3/</u>				
Av. Size (LE)	100	1,000	735	240
No. Loans (by 12/86)	92,700	10,200	23,600	126,500
No. Farmer Borrowers	29,600	4,700	23,600	57,900

1/ Figures drawn from Table 1.5 multiplied by 38 Village Banks and rounded. Because Table 1.5 represents a country-whole average village bank, the number of farmer-borrowers in this table (167,100) does not correspond to the actual number of farmer-borrowers in the 38-VB project area (181,000) presented in Table 1.6.

2/ Drawn from Annex Table 1.3, Part A, and rounded.

3/ Drawn from Annex Table 1.3, Part B, and rounded.

All averages are weighted.

Annex Table 1.3
 SFPP: PROJECTED NUMBER OF LOANS AND FARMERS, ORIGINAL PROJECT
 AND PROPOSED AMENDMENT

A. ORIGINAL PROJECT (LE 13.1 MILLION CAPITAL FUND)

	CROPS	BROIL/PULL	BUF./COM	OTHER LIVE- STOCK	FARM EQUIP.	OTHER	TOTAL
LOAN MIX (% VOLUME)	0.04	0.35	0.32	0.16	0.05	0.08	1.00
LOANABLE FUNDS FACT.	1.50	1.00	1.00	1.00	1.00	1.00	
REPAYMENT FACTOR	1.00	1.00	0.25	0.66	0.33	0.33	
LOAN SIZE	75	3097	979	913	1106	2627	

5/79-8/83 (TO DATE)							
OLD MONEY	304000	2660000	2432000	1216000	380000	608000	7600000
NEW MONEY	0	0	0	0	0	0	0
OLD + NEW MONEY	304000	2660000	2432000	1216000	380000	608000	7600000
CAPITAL FUND	304000	2660000	2432000	1216000	380000	608000	7600000
LOANABLE FUND	456000	2660000	2432000	1216000	380000	608000	7752000
NUMBER OF LOANS	6080	859	2484	1332	344	231	11330
NUMBER OF FARMERS	4053	215	2484	1332	344	231	8659

9/83-9/84 (PROJECTED)							
OLD MONEY	304000	2660000	608000	802560	125400	200640	4700600
NEW MONEY	220000	1925000	1760000	880000	275000	440000	5500000
OLD + NEW MONEY	524000	4585000	2368000	1682560	400400	640640	10200600
CAPITAL FUND	408024	3570210	3264192	1632096	510030	816048	10200600
LOANABLE FUND	612036	3570210	3264192	1632096	510030	816048	10404612
NUMBER OF LOANS	8160	1153	3334	1788	461	311	15207
NUMBER OF FARMERS	5440	288	3334	1788	461	311	11622

10/84-10/85 (PROJECTED)							
OLD MONEY	408024	3570210	1424048	1879743	293710	469936	8045671
NEW MONEY	0	0	0	0	0	0	0
OLD + NEW MONEY	408024	3570210	1424048	1879743	293710	469936	8045671
CAPITAL FUND	321827	2815985	2574615	1287307	402284	643654	8045671
LOANABLE FUND	482740	2815985	2574615	1287307	402284	643654	8206585
NUMBER OF LOANS	6437	909	2630	1410	364	245	11994
NUMBER OF FARMERS	4291	227	2630	1410	364	245	9167

11/85-12/86 (PROJECTED)							
OLD MONEY	321827	2815985	2067702	2729366	426463	682342	9043685
NEW MONEY	0	0	0	0	0	0	0
OLD + NEW MONEY	321827	2815985	2067702	2729366	426463	682342	9043685
CAPITAL FUND	361747	3165290	2893979	1446990	452184	723495	9043685
LOANABLE FUND	542621	3165290	2893979	1446990	452184	723495	9224558
NUMBER OF LOANS	7235	1022	2956	1585	409	275	13482
NUMBER OF FARMERS	4823	256	2956	1585	409	275	10304

TOTAL LOANS	27912	3943	11404	6114	1577	1063	52013
TOTAL FARMERS	6202	438	11404	6114	1577	1063	26798

ASSUMPTIONS

	CROPS	EGGS	BROILERS	PULLETS	COW	BUFFALO	EQUIP	OTHER	TOTAL
LOAN MIX (YEAR 1)	0.10	0.20	0.10	0.10	0.12	0.12	0.20	0.06	1.00
LOAN MIX (YEAR 2)	0.16	0.20	0.07	0.07	0.12	0.12	0.20	0.06	1.00
LOAN MIX (YEAR 3)	0.20	0.20	0.05	0.05	0.12	0.12	0.20	0.06	1.00
LOANABLE FUNDS FACTOR (YEAR 1)	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LOANABLE FUNDS FACTOR (YEAR 2)	1.60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LOANABLE FUNDS FACTOR (YEAR 3)	1.70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
REPAYMENT FACTOR	1	1	1	1	0.25	0.25	0.32	0.25	
LOAN SIZE (LE)	100	700	3000	6000	1200	300	1150	10000	

1/84-12/84 (PROJECTED)

OLD MONEY (YEAR 1)									
NEW MONEY (YEAR 1)	700000	1400000	700000	700000	840000	840000	1400000	420000	7000000
OLD + NEW MONEY	700000	1400000	700000	700000	840000	840000	1400000	420000	7000000
CAPITAL FUND (YEAR 1)	700000	1400000	700000	700000	840000	840000	1400000	420000	7000000
LOANABLE FUND (YEAR 1)	1050000	1400000	700000	700000	840000	840000	1400000	420000	7350000
NUMBER OF LOANS	10500	2000	47	39	700	2800	1217	42	17345
NUMBER OF FARMERS	7000	2000	47	39	700	2800	1217	42	13845

1/85-12/85 (PROJECTED)

OLD MONEY (YEAR 2)	700000	1400000	700000	700000	210000	210000	462000	105000	4487000
NEW MONEY (YEAR 2)	1600000	2000000	700000	700000	1200000	1200000	2000000	600000	10000000
OLD + NEW MONEY (YEAR 2)	2300000	3400000	1400000	1400000	1410000	1410000	2462000	705000	14487000
CAPITAL FUND (YEAR 2)	2317920	2897400	1014090	1014090	1738440	1738440	2897400	869220	14487000
LOANABLE FUND (YEAR 2)	3708672	2897400	1014090	1014090	1738440	1738440	2897400	869220	15877752
NUMBER OF LOANS	37087	4139	68	56	1449	5795	2519	87	51200
NUMBER OF FARMERS	23179	4139	68	56	1449	5795	2519	87	37292

1/86-12/86 (PROJECTED)

OLD MONEY (YEAR 3)	2317920	2897400	1014090	1014090	644610	644610	1418142	322305	10273167
NEW MONEY (YEAR 3)	600000	600000	150000	150000	360000	360000	600000	180000	3000000
OLD + NEW MONEY (YEAR 3)	2917920	3497400	1164090	1164090	1004610	1004610	2018142	502305	13273167
CAPITAL FUND (YEAR 3)	2654633	2654633	663658	663658	1592780	1592780	2654633	796390	13273167
LOANABLE FUND (YEAR 3)	4512877	2654633	663658	663658	1592780	1592780	2654633	796390	15131410
NUMBER OF LOANS	45129	3792	44	37	1327	5309	2308	80	58027
NUMBER OF FARMERS	26546	3792	44	37	1327	5309	2308	80	39444
TOTAL LOANS	92715	9931	159	132	3476	13904	6045	209	126571
TOTAL FARMERS	29564	4406	159	132	3476	13904	6045	209	57895

LOAN MIX= PERCENTAGE VOLUME OF CAPITAL FUNDS LENT IN EACH ENTERPRISE CATEGORY. LOANABLE FUNDS FACTOR=NUMBER OF TIMES A LOAN IS MADE IN ONE YEAR. REPAYMENT FACTOR =PERCENTAGE OF LOAN REPAYED BY JANUARY 1ST OF THE FOLLOWING YEAR. OLD MONEY=CAPITAL FUND OF PREVIOUS YEAR MULTIPLIED BY REPAYMENT FACTOR. NEW MONEY=ANNUAL ADDIT. OF NEW LOAN FUNDS TO PROJ. CAPITAL FUND=NEW MONEY + OLD MONEY, MULTIPLIED BY PERCENTAGE LOAN MIX. LOANABLE FUNDS=CAPITAL FUND MULTIPLIED BY LOANABLE FUNDS FACTOR. NUMBER OF LOANS= LOANABLE FUNDS DIVIDED BY LOAN SIZE (EXCEPT BROILERS AND PULLETS- SEE BELOW). NUMBER OF NEW FARMERS FOR CROP= NUMBER OF LOANS DIVIDED BY LOANABLE FUNDS FACTOR (SINCE SAME FARMER TAKES OUT 2ND LOAN) WITH 90% SAME FARMERS TAKING OUT LOANS IN SUBSEQUENT YEARS. NUMBER OF FARMERS FOR EGGS= NUMBER OF LOANS, WITH 90% SAME FARMERS TAKING OUT LOANS IN SUBSEQUENT YEARS. NUMBER OF FARMERS FOR BROILERS AND PULLETS= LOANABLE FUNDS DIVIDED BY LOAN SIZE MULTIPLIED BY 5 AND 3 RESPECTIVELY, SINCE FARMERS TAKE OUT 5 BROILER AND 3 PULLET LOANS PER YEAR. NUMBER OF FARMERS TAKING OUT COW, BUFFALO, FARM EQUIPMENT AND "OTHER" LOANS EQUAL TO NUMBER OF LOANS..

Annex Table 1.4Actual SFPP Loan Mix:
Beginning of Project Through 12/82

	<u>Total Number</u>	<u>% No. loans</u>	<u>Total Amount Loaned (000 LE)</u>	<u>% Amount Loaned</u>	<u>Average Loan Size (LE)</u>
Crop Production <u>1/</u>	1,748	(31%)	128.6	(2%)	75
Broilers/Pullets	633	(11%)	1960.3	(35%)	3,097
Dairy buf./cow	1,896	(34%)	1,855.5	(33%)	979
Other livestock <u>2/</u>	941	(17%)	859.0	(16%)	913
Farm Equipment <u>3/</u>	268	(5%)	236.5	(5%)	1,106
Other <u>4/</u>	166	(2%)	436.1	(8%)	2,627
	<u>5,652</u>	<u>(100%)</u>	<u>5,536.0</u>	<u>(100%)</u>	<u>980</u>

1/ Fertilizer, seeds and plants, chemicals, custom-work, etc.

2/ Cattle, sheep and pigeon feeding; buffalo/camel and donkey work; rabbit production; sheep breeding; and beekeeping.

3/ Sicklemowers, irrigation pumps, sprayers, generators, tractors, small trucks, implements, repairs, dairy and poultry equipment and honey bee cells.

4/ Buildings for animals, chickens and pigeons (7%), other buildings, irrigation wells, repair/renovation and family-related.

Source: Governorate Monthly Reports, SFPP.

Annex Table 1.5

PBDAC: Average Capital Funds, Volume Loans Made
Loan Size and Number of Loans and Farmers
Per Village Bank, 1981/82

	<u>Capital Fund</u>	<u>Volume Loans Made</u>	<u>Average Size Loan</u>	<u>Number Loans</u>	<u>Number Farmers</u>	<u>Annual Interest Rate</u>
Short Term						
Crops	295,361	383,970	70	5,410	4,360	6%
Livestock	98,453	127,990	3,000	44	28	6%
Poultry	56,260	56,260	3,700	15	3	6%
Other	21,100	21,100	3,500	6	6	14%
	<u>471,174</u>	<u>589,320</u>	<u>108</u>	<u>5,475</u>	<u>4,397</u>	<u>6%</u>
Medium Term						
Mechanization	56,260	56,260	NA	NA	NA	7 & 8%
Livestock	73,140	73,140	73,140	1	1	6%
Poultry	61,880	61,880	61,880	1	1	6%
Other	78,760	78,760	15,750	5	5	13%
	<u>270,040</u>	<u>270,040</u>	<u>38,577</u>	<u>7</u>	<u>7</u>	<u>9%</u>
Grand Total	741,214	859,360	156	5,482	4,404	7%

Total PBDAC loans made by Village Banks in GOE FY 1982 (6/81-6/82) divided by 711 village banks. Amount of long term loans is negligible. All averages are weighted.

Annex Table 1.6

Total Farmers Serviced by Village Banks
in Project Area'

<u>Current Project (27VBs)</u>		<u>Supplement (11 VBs)</u>	<u>Total</u>
<u>Assiut Governorate</u>			
(Assiut Branch)			
Mutiah VB	2,971	Assiut VB *	2,815
Rifa VB	2,904	Mangabad VB	5,022
Musha VB	2,680	B. Husein VB	3,755
	<u>8,555</u>		<u>11,592</u>
			20,147
(Abnoub Branch)			
Abnoub VB	5,880		-
Hammam VB	3,000		-
El Maasara VB	2,920		-
	<u>11,800</u>		-
			11,800
(Abu Tieg Branch)			
Abu Tieg VB	5,100		-
Deweina VB	3,000		-
Nikheila VB	2,058		-
	<u>10,158</u>		-
Subtotal	30,513		11,592
			42,105
<u>Qalyubayia Governorate</u>			
(Benha Branch)			
Sandanhour VB	4,567		-
Sheblanga VB	5,531		-
Kafr El Arbain VB	1,663		-
Kafr El Gazan VB	5,108		-
	<u>16,869</u>		-
			16,869
(Toukh Branch)			
Tersa VB	4,270		-
Kaha VB	3,909	Toukh VB *	3,446
Aghour VB	4,167	El Deer VB	3,239
Beltan VB	7,535	M. Kanana VB	2,962
EKiad Degwa VB	6,262	M. Hor VB	2,381
	<u>26,143</u>		<u>12,028</u>
			38,171
Subtotal	43,012		12,028
			55,040

Table 1.6 (Cont'd)

<u>Current Project (27 VBs)</u>		<u>Supplement (11 VBs)</u>		<u>Total</u>
<u>Sharkia Governorate</u>				
(Zagazig Branch)				
		Zagazig VB	0, *	
		Kinayale VB	13,379	
Asloughi VB	6,043	O. Alzin VB	4,950	
Bordien VB	7,411	Shimpara VB	3,937	
Zankalon VB	4,774	B. Amir VB	11,520	
	<u>18,228</u>		<u>33,786</u>	52,014
(Ibrehimia Branch)				
Ibrehimia VB	6,915		-	
Mubasher VB	2,298		-	
	<u>9,213</u>			9,213
(Hihya Branch)				
Hihya	7,917		-	7,917
(Bilbes Branch)				
Kafr Ayoub VB	4,596		-	
Shobra El N. VB	5,857		-	
Balashene VB	4,497		-	
	<u>14,950</u>			14,950
Subtotal	50,308		33,786	84,094
<u>Grand Total</u>	123,833		57,406	181,239

* Branch Banks. Zagazig Branch Bank is primarily an administrative unit with small number of clientele and therefore is not counted as a new VB.

Source: PBDAC.

Annex Table 1.7

Budgeted Loan Funds, Loan Disbursements and Repayments
(LE)

	<u>Disbursement to SFPP Budgeted in Project Agreement as Amended</u>	<u>Short Term</u>		<u>Medium & Long Term</u>		<u>Total</u>		<u>Total Loan Repayments Thru 8/83</u>
		<u>Amount</u>	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>	<u>No.</u>	
1980	442,500	0	0	0	0	0	0	0
1981	955,000	460,972	484	208,151	160	669,123	644	165,632
1982	2,580,192	2,264,632	2,315	2,804,029	2,624	5,068,661	4,939	1,857,048
1983	4,910,542 <u>1/</u>	3,357,835	4,518	2,226,537	2,389	5,584,372	6,907	3,599,059
1984	4,239,000 <u>2/</u>	-	-	-	-	-	-	-
	<u>13,127,234</u>	<u>6,083,439</u>	<u>7,317</u>	<u>5,238,717</u>	<u>5,173</u>	<u>11,322,156</u>	<u>12,490</u>	<u>5,621,739</u>

1/ As of 8/83, about 1,300,000 had yet to be disbursed to the SFPP loan fund.

2/ Yet to be disbursed.

Source: SFPP Loan Data.

Annex 2Economic Analysis 1/

Summary.--Based upon actual SFPP farm records, the following analysis demonstrates that farmers taking out loans under the project have realized substantial increases in farm income. In terms of the value to the economy as a whole, the project has a relatively high economic rate of return (39%), due primarily to the relatively large number of loans to farmers for investments which have low capital requirements but high returns.

A. Farm-Level Analysis

The SFPP program has assisted farmers in developing profitable financial enterprises on their farms. Unit activity budgets (budgets which apply to some particular investment activity) were prepared for a range of farm activities for which loans have been provided under the SFPP program. These budgets (Tables 2.3-2.14) were prepared in order to: (1) give an indication of the financial incentives for farmers to participate in the program; and (2) estimate the aggregate economic returns of the project (see next section). Primary data for Tables 2.3-2.14 are based upon actual performance by farmers as recorded in the SFPP farm record books.

Internal rates of return (IRR) after financing were computed for each budget and presented in Table 2.1. The IRR represents the earning power of the LE invested in each activity. The economic IRRs before financing were also computed in Table 2.1, using "shadow" prices for inputs and outputs (excluding loan receipts and debt service, which are treated as transfer payments).

Data.--The activity budgets in Tables 2.3-2.14 represent a common type of loan by activity area (crops, eggs, broilers, pullets, cow, water buffalo, farm equipment and other). In actuality, the range of small farm non-crop activities financed under the project has been more diverse, including: cattle, sheep, pigeon and rabbit feeding; sheep and goat breeding; beekeeping; and purchase of diesel pumps, back-pack sprayers, generators, roto-tillers, and other small farm equipment (See Annex Table 1.3).

The "other" category refers to construction of farm buildings, often a second-story addition to a broiler or pullet building or construction of a barn to house ruminant livestock.

1/ The analysis in this section follows the method and format described in J. Price Gittinger, Economic Analysis of Agricultural Projects, John Hopkins University Press, 2nd edition, 1982.

Farm financial budgets presented in Tables 2.3-2.6 for wheat, lentils and broadbeans (winter season crops) and maize and tomatoes (summer season crops) represent only a portion of actual loan activities for crops. Additional loans are provided for: chickpeas, peas, onion, cabbage, cucumbers, potatoes and garlic; "block" farming (consolidation of fields) for wheat, berseem, beans and other vegetables; production of wheat and maize seed; and, more recently, high-value fruit crops. Many of the technological "packages" for which crop loans are provided in the SFPP program (such as the wheat, maize, tomato and lentil packages) were developed under AID-funded extension/demonstration projects, such as Major Cereals Improvement and Agricultural Development Systems. Crop loan size ranges from LE 50 to 200 and is estimated to average LE 100 under this amendment, compared to an average of LE 70 offered by the PBDAC under its traditional program (See Annex 1). "With" and "without" situations (which include labor costs) were presented in the crop budgets to capture the changes in net income from the adoption of new packages, due in part to availability of credit.

The budgets for family egg batteries, broilers, pullets (young hens supplied to other layer operations, including family egg batteries), water buffalo and improved cows represent essentially new activities added on to the farm enterprise where none existed before. 1/

Results of Economic Analysis.—For crop loans, eggs, pullets and farm equipment, both financial and economic rates of return are quite high (Table 2.1). (Financial prices for inputs and outputs of the activities are converted to their shadow equivalents according to the adjustment factors listed in Table 2.15).

Financial rates of return for broilers and dairy animals are high, due to the effects of GOE agricultural pricing policies. Feed and other subsidies to broiler and livestock producers, and limitations on imports and marketing of meat and poultry by the private sector, appear to constitute a policy effort on the part of the GOE to increase domestic production by providing producer subsidies.

1/ The labor utilized in these activities is essentially family labor, primarily women (See Annex 3). It was not possible to estimate a wage rate for this labor. There is, however, evidence which suggests that its opportunity cost is very low, in spite of increasing rural wage rates. (See: B. Hansen and S. Radwan, Employment Opportunities and Equity in a Changing Economy: Egypt in the 1980s, ILO, Geneva, 1982, pp. 6, 42-43 and 108). This would imply that the labor involved in the new activity does not seriously compete with other farm activities.

For broilers, the low economic rates of return found here are consistent with a recent study 1/ funded under the AID Agricultural Development Systems Project. This study estimated that, given current technical performance, Egypt loses its comparative advantage in poultry meat production below a farm size of 250,000 broilers per year. Smaller producers who average 25,000/year, such as those under the project, have high financial rates of return to capital when inputs (chicks and feed) are priced at subsidized levels, but low to negative returns when inputs are priced at shadow, or international, levels. Profit margins of these small producers are just about equal to the extra amount they would have to pay were chicks and feed sold to them at unsubsidized prices. However, economic returns for broiler producers under the project are likely to be higher than small producers elsewhere in the country, because veterinary assistance (normally available only to larger farmers) is made available to them at cost. In view of the evidence of poor economic returns to broiler production, efforts will be made to reduce the volume of project loan funds allocated to broiler loans.

The economic rates of return for improved cow and water buffalo enterprises are also lower due to GOE subsidies on feed concentrates, and utilization in the analysis of shadow prices based upon the C.I.F. costs of frozen red meat and powdered milk. Utilization of the latter may underestimate the economic benefits of cow and water buffalo activities, as very little frozen meat and powdered milk are consumed in rural areas, and a large proportion of milk production is not traded on local markets but consumed at home. It should be noted that because of relatively low feed and labor costs in comparison to larger commercial production systems, the production of milk and dairy products on small farms, such as the beneficiaries of this project, has relatively stronger economic justification than other dairy systems in Egypt. 2/ Improvement of technical performance by the introduction of improved breeds of water buffalos and cows at the farm level under the SFPP program helps bring unit costs of dairy production more in line with international prices. Loans for livestock under the project have been, and will continue to be, limited to improved breeds.

1/ I. Soliman and A. Ibrahim, The Productive Efficiency of the Broiler Industry in Egypt, ADS Economic Working Paper No. 122, March, 1983.

2/ I. Soliman, T.A. El-Zaher and J. Fitch, Milk Production Systems in Egypt and the Impact of Government Policies, ADS Economics Working Paper No. 121 (revised), March 1983.

3. Project Analysis

The aggregate economic analysis of the proposed project amendment is limited to the examination of the relationship between the added AID and GOE investment in the SFPP program to the farmer benefit stream made possible by this investment.

Individual farm costs and benefits before financing were converted to economic values (Table 2.15). Total economic costs and benefits by activity were then aggregated according to an assumed loan mix by dividing loanable funds by the size of loan for each activity. Loans are given to farmers over a three-year period, which creates a stream of farm costs and benefits ending year 14. After Year 3, it is assumed that reflows from the LE 20 million capital fund are lent elsewhere under non-project auspices 1/.

In terms of value to the economy as a whole, the project has a high average economic rate of return. The economic IRR is 39 percent (Table 2.1) even when Village Bank and warehouse construction is charged entirely as a cost of lending. The high return is due primarily to the relatively large number of loans to farmers for investments in crops, egg batteries and small farm equipment which have low capital requirements but high returns. The Project IRR is thus very sensitive to variations in total farmer benefits and costs (Table 2.2), but less sensitive to increases in project costs (administrative, etc.).

1/ Additional methodological notes are presented in the footnotes to Table 2.16.

Annex Table 2.1SFPP Amendment: Internal Rates
of Return for Farm Enterprises 1/

	<u>Financial</u>	<u>Economic</u>	<u>No. Loans Year 3 (rounded)</u>
Crops 2/	+ 50%	+ 50%	45,100
Eggs	+ 50%	+ 50%	3,800
Broilers	38%	5%	45
Pullets	37%	24%	40
Cow	49%	14%	1,350
Water Buffalo	46%	16%	5,300
Farm Equipment	+ 50%	+ 50%	2,300
Other (addition to broiler house)	50%	4%	80
			<u>58,000</u>

1/ The internal rate of return (IRR) represents the average earning power of money used in an enterprise over its life. It is the discount rate at which net present value of benefits and costs are equal to zero.

2/ Average of returns for wheat, maize, tomatoes, broad beans and lentils (Tables 1.3-1.6).

Annex Table 2.2SFPP Amendment: Project Economic
Internal Rate of Return

	<u>Economic</u>
Project IRR	39%
Project IRR with 10% reduction in crop, egg and farm equipment benefits	27%
Project IRR with 10% reduction in total farm benefits	15%
Project IRR with 10% increase in total farm costs	19%
Project IRR with 10% increase in project costs	35%

Table 2.3 Financial Analysis: Wheat

Item	Without Project	With project
1. Receipts:		
Grain: Yield/fd	1.4 mt	2.3 mt
Price/mt	86 LE	86 LE
Straw: Yield/fd	2.3 mt	2.8 mt
Price/mt	56 LE	56 LE
Gross value of Production (LE)	249	355
2. Expenses (LE):		
Tillage	11	15
Seed/planting	9	14
Irrigation	18	20
Weed Control	5	20
Pest Control	1	5
Fertilization	27	36
Harvest	<u>37</u>	<u>44</u>
Total (LE)	<u>108</u>	<u>154</u>
3. Farm Net Benefit (LE) before financing	141	201
4. Financing		
Loan Receipts (ST)		
Short term	-	50
Debt Service		
Short term interest	-	3
Short term principal	-	50
Net financing	-	(3)
Net benefits after financing	141	198
Incremental	-	57

Source: Egyptian Major Cereals Improvement Project and Agricultural Research Center, Educational and Economic Effect of Extension Demonstrations for Developing Major Cereals Crops, First Stage, 1981, and EMCIP, Summary of 80/81 wheat Demonstrations, 1983.

Table 2.4 Financial Analysis: Maize

Item	Without Project	With Project
1. Receipts:		
Grain: Yield/fd	1.7 mt	3.1 mt
Price/mt	93 LE	93 LE
Straw: Yield/fd	1.8 mt	2.6 mt
Price/mt	10 LE	10 LE
Gross value of production (LE)	176	314
2. Expenses (LE):		
Tillage	15	20
Seed/planting	9	18
Irrigation	24	25
Weed Control	18	23
Pest Control	7	14
Fertilization	53	62
Harvest	<u>12</u>	<u>13</u>
Total (LE)	<u>138</u>	<u>175</u>
3. Farm Net Benefit (LE) before financing	38	139
4. Financing		
Loan receipts		
Short term	-	50
Debt Service		
Short term interest	-	30
Short term principal	-	50
Net financing	-	(3)
Net benefits after financing	38	136
Incremental	-	98

Source: EMCIP/ARC Study, Second Stage, 1982, and SFPP data.

Table 2.5: Financial Analysis: Tomatoes

Item	Without Project	With Project
1. Receipts:		
Yield/fd. Price/mt.	15	19
Gross financial value of production	100 LE 1,500 LE	100 LE 1,900 LE
2. Expenses		
Tillage	44	50
Planting	52	150
Irrigation	92	95
Weed Control	60	62
Pest Control	48	60
Fertilizer	110	115
Harvest	<u>60</u>	<u>100</u>
Total	466	632
3. Farm net benefit (LE) before financing	1,034	1,268
4. Financing		
Loan receipt		
Short term		
Debt Service	-	175
Short term interest	-	11
Short term principal	-	175
Net financing	-	(11)
Net benefits after financing	1,034	1,257
Incremental	-	223

Source: MOA and Agricultural Development Systems Project Data.

Table 2.6 Financial Analysis: Broad Beans

Item		Without Project	With Project
1. Receipts:			
Crop	Yield/ha	1.06mt	1.67mt
Price/mt		235 LE	235 LE
Gross value of production (LE)		249	392
2. Expenses (LE):			
Tillage		24	26
Seed/planting		33	30
Irrigation		23	23
Weed Control		60	63
Pest Control		-	10
Fertilization		30	28
Harvest		<u>40</u>	<u>45</u>
Total (LE)		<u>210</u>	<u>225</u>
3. Farm Net Benefit LE before financing		39	167
4. Financing			
Loan Receipts			
Short term		-	50
Debt Service			
Short term interest		-	3
Short term principal		-	50
Net financing		-	(3)
Net benefits after financing		39	164
Incremental		-	125

Source: MOA & El Kholie Report, and SFPP data.

Table 2.7 Financial Analysis: Lentils

Item	Without Project	With project
1. Receipts:		
Crop: Yield/ha	0.54mt	0.93mt
Price/mt	437.5 LE	437.5 LE
Gross value of production (LE)	236	407
2. Expenses (LE):		
Tillage	15	18
Seed/planting	60	65
Irrigation	15	35
Weed Control	50	35
Fertilization	10	17
Harvest	<u>48</u>	<u>55</u>
Total (LE)	<u>198</u>	<u>225</u>
3. Farm Net Benefit LE before financing	38	182
4. Financing		
Loan Receipts		
Short term	-	50
Debt Service		
Short term interest:	-	3
Short term principal	-	50
Net financing	-	(3)
Net benefits after financing	38	179
Incremental	-	141

Source: MOA, El Kholie Report, and R. Deuson et al., Economic Analysis of 1981/82 Lentil Production Demonstration Program, EMCIP pub. No. 57, 1983.

Table 2.8
Financial Analysis: Egg Production
(LE)

<u>A. Costs</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Investment (wire battery)	240	-	-	-	-
Pullets (96 112-day-old hens @ LE 4.0 each)	384	384	384	384	384
Transportation for birds & feed	35	35	35	35	35
Feed (market price of LE 170/MT)	581	581	581	581	581
Veterinary services	30	30	30	30	30
Maintenance and repairs	25	25	25	25	25
Total	1,295	1,055	1,055	1,055	1,055
 <u>B. Benefits</u>					
Table eggs (20,259 X LE 0.08 each)	1,621	1,621	1,621	1,621	1,621
Culls (83 X LE 2.25 each)	187	187	187	187	187
Total	1,808	1,808	1,808	1,808	1,808
Net Benefits before financing	513	753	753	753	753
 <u>C. Financing</u>					
Loan Receipts					
Short term <u>1/</u>	460	460	460	-	-
Medium term <u>2/</u>	240	-	-	-	-
Debt Service					
Short term interest	55	55	55	-	-
Short term principal	460	460	460	-	-
Medium term interest	29	19	10	-	-
Medium term principal	80	80	80	-	-
Net Financing	76	(154)	(145)	-	-
Net Benefits After Financing	589	599	608	753	753

1/ LE 460 for 12 months at 12% annual interest.

2/ LE 240 for 3 years at 12% annual interest.

Source: SFPP farm management data.

Annex Table 2.9
Financial Analysis: Broilers

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
A. Costs										
Investment <u>1/</u>	22,400	-	-	-	-	-	-	-	-	-
Equipment	4,190	-	-	4,190	-	-	4,190	-	-	1,397
Chicks (five cycles of 5,000 each X LE 0.32)	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Transportation for chicks & feed	470	470	470	470	470	470	470	470	470	470
Chick cartons	250	250	250	250	250	250	250	250	250	250
Feed (market prices) <u>2/</u>	15,185	15,185	15,185	15,185	15,185	15,185	15,185	15,185	15,185	15,185
Veterinarian services	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
Litter (straw bedding)	200	200	200	200	200	200	200	200	200	200
Water, fuel, electricity	500	500	500	500	500	500	500	500	500	500
Maintenance	300	300	300	300	300	300	300	300	300	300
Salaries <u>3/</u>	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
Other costs (cleaning materials, etc.)	300	300	300	300	300	300	300	300	300	300
Insurance	100	100	100	100	100	100	100	100	100	100
Total	55,345	28,755	28,755	32,945	28,755	28,755	32,945	28,755	28,755	30,152
B. Benefits										
Broilers (23,765 birds X 1.3 kg./each X LE 1.20 kg.)	37,073	37,073	37,073	37,073	37,073	37,073	37,073	37,073	37,073	37,073
Manure (25 m ³ X LE 6.0)	150	150	150	150	150	150	150	150	150	150
Residual value of investment	-	-	-	-	-	-	-	-	-	-
Total Benefits	37,223	37,223	37,223	37,223	37,223	37,223	37,223	37,223	37,223	11,200
Net benefits before financing	(18,122)	8,468	8,468	4,278	8,468	8,468	4,278	8,468	8,468	18,271
C. Financing										
Loan receipts <u>4/</u>	15,000	-	-	-	-	-	-	-	-	-
Debt Service										
Short term interest	1,233	-	-	-	-	-	-	-	-	-
Short term principal	15,000	-	-	-	-	-	-	-	-	-
Net Financing	(1,233)	-								
Net Benefits after Financing	(19,355)	8,468	8,468	4,278	8,468	8,468	4,278	8,468	8,468	18,271

1/ Concrete structures valued at LE 22,400.

2/ 25 MT starter @ LE 235/MT and 40 MT finish @ LE 190/MT.

3/ Includes 15% social security and 10% incentives.

4/ LE 3,000 every 50 days

Source: SFPP Farm Management Data.

Table 2.10
Financial Analysis: Pullets
(LE)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
A. Costs										
Investment <u>1/</u>	25,400	-	-	-	-	-	-	-	-	-
Equipment	2,194	-	-	2,194	-	-	2,194	-	-	731
Chicks (3 cycles of 3,000 X LE 0.50)	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500
Transportation costs for birds & feed	300	300	300	300	300	300	300	300	300	300
Feed (market prices) <u>2/</u>	9,620	9,620	9,620	9,620	9,620	9,620	9,620	9,620	9,620	9,620
Chick cartons	90	90	90	90	90	90	90	90	90	90
Veterinarian services	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Litter (straw bedding)	120	120	120	120	120	120	120	120	120	120
Water, fuel, electricity	460	460	460	460	460	460	460	460	460	460
Maintenance	240	240	240	240	240	240	240	240	240	240
Salaries <u>3/</u>	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
Other costs (cleaning materials, etc.)	300	300	300	300	300	300	300	300	300	300
Insurance	100	100	100	100	100	100	100	100	100	100
Total	47,324	19,730	19,730	21,924	19,730	19,730	21,924	19,730	19,730	20,461
B. Benefits										
Hens (7,680 X LE 3.5)	26,880	26,880	26,880	26,880	26,880	26,880	26,880	26,880	26,880	26,880
Pullets (360 X LE 2.0)	720	720	720	720	720	720	720	720	720	720
Manure (98m ³ X LE 6.0)	588	588	588	588	588	588	588	588	588	588
Residual of investment	-	-	-	-	-	-	-	-	-	-
Total	28,188	12,700								
Net Benefits before financing(19,136)	8,458	8,458	8,458	6,264	8,458	8,458	6,264	8,458	8,458	20,427
C. Financing										
Loan receipts										
Short term <u>4/</u>	18,000	-	-	-	-	-	-	-	-	-
Debt service										
Short term interest	1,988	-	-	-	-	-	-	-	-	-
Short term principal	18,000	-	-	-	-	-	-	-	-	-
Net financing	(1,988)	-	-	-	-	-	-	-	-	-
Net benefits after financing	(21,124)	8,458	8,458	6,264	8,458	8,458	6,264	8,458	8,458	20,427

1/ Concrete structures valued at LE 25,400.

2/ 17.55 MP starter @ LE 210/MP and 30.15 MP pullet @ LE 185/MP.

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
A. Costs												
Investment	300	-	-	-	-	-	-	-	-	-	-	-
Berseem <u>1/</u>	271	376	376	376	376	376	376	376	376	376	376	376
Dairy concentrate <u>2/</u>	0	32	32	32	32	32	32	32	32	32	32	32
Straw <u>3/</u>	104	144	144	144	144	144	144	144	144	144	144	144
TOTAL	<u>675</u>	<u>552</u>	<u>552</u>	<u>552</u>	<u>552</u>	<u>552</u>	<u>552</u>	<u>552</u>	<u>552</u>	<u>552</u>	<u>552</u>	<u>552</u>
B. Benefits												
Milk <u>4/</u>	0	434	326	602	862	648	434	694	724	434	281	459
Sale of calf	0	200	200	-	200	200	200	-	200	200	200	-
Manure <u>5/</u>	45	99	99	99	99	99	99	99	99	99	99	99
Power <u>6/</u>	0	49	49	49	49	49	49	49	49	49	49	49
Sale of Cow	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	<u>45</u>	<u>782</u>	<u>674</u>	<u>750</u>	<u>1,210</u>	<u>996</u>	<u>782</u>	<u>842</u>	<u>1,072</u>	<u>782</u>	<u>629</u>	<u>1,557</u>
Net Benefits before financing	(630)	230	122	198	658	444	230	290	520	230	77	1,005
C. Financing												
Loan Receipt												
Medium term <u>7/</u>	300	-	-	-	-	-	-	-	-	-	-	-
Debt Service												
Medium term interest	36	27	18	9	-	-	-	-	-	-	-	-
Medium term principal	75	75	75	75	-	-	-	-	-	-	-	-
Net financing	189	(102)	(93)	(84)	-	-	-	-	-	-	-	-
Net Benefit after financing	(441)	128	29	114	658	444	230	290	520	230	77	1,005

1/ 18.8 mt. fed during full lactation (price: LE 20/mt).

2/ 0.8 mt. fed during full lactation (price: LE 40/mt).

3/ 1.8 mt./yr. at maturity (price: LE 56/mt).

4/ Milk production net of weaning requirements. Year 1:0; Year 2:0.850; Year 3:0.640 MT; Year 4:1.180 MT; Year 5:1.690 MT; Year 6:1.270MT; Year 7:0.850 MT; Year 8:1.360 MT; Year 9:1.420 MT; Year 10:0.850 MT; Year 11:0.550 MT; Year 12:0.900 MT.

5/ Fourteen percent of average gross revenues. Source: ADS Economics Working Paper No. 85, 1982, Table 12.

6/ Seven percent of average gross revenues, based upon op.cit and ADS Economics Working Paper No. 123, 1983, Table 3.

7/ LE 300 for four years at 12% annual interest.

Source: SFPP farm management data.

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Table 2.12
Financial Analysis: Improved Cow

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
A. Costs										
Investment (LE 1,200)	1,200	-	-	-	-	-	-	-	-	-
Berseem <u>1/</u>	302	420	420	420	420	420	420	420	420	300
Dairy concentrate <u>2/</u>	0	72	72	72	72	72	72	72	72	0
Straw <u>3/</u>	40	56	56	56	56	56	56	56	56	56
Total	1,542	548	548	548	548	548	548	548	548	356
B. Benefits										
Milk <u>4/</u>	0	645	855	915	1,050	1,185	1,185	945	675	300
Sale of Calf	0	200	200	200	0	200	200	200	200	-
Manure <u>5/</u>	100	130	130	130	130	130	130	130	130	130
Sale of Cow	-	-	-	-	-	-	-	-	-	1,000
Total	100	975	1,185	1,245	1,180	1,515	1,515	1,275	1,005	1,430
Net Benefits before financing	(1,442)	427	637	697	632	967	967	727	457	1,074
C. Financing										
Loan Receipts										
Medium term <u>6/</u>	1200	-	-	-	-	-	-	-	-	-
Debt Service										
Medium term interest	144	108	72	36	-	-	-	-	-	-
Medium term principal	300	300	300	300	-	-	-	-	-	-
Net Financing	756	(408)	(372)	(336)	-	-	-	-	-	-
Net Benefit after financing	(686)	19	265	361	632	967	967	727	457	1,074

1/ 18 MT fed during full lactation, 3 MT fed rest of year (price: LE 20/mt.)

2/ 1.6 mt. fed during full lactation, 0.2 mt rest of year (price: LE 40/mt).

3/ 1.0 mt./year at maturity (price: LE 56/mt).

4/ Milk production net of weaning requirements. Year 1:0; Year 2:2.15 mt; Year 3:2.85mt; Year 4:3.05; Year 5:3.50; Year 6:3.95; Year 7:3.95; Year 8:3.15; Year 9:2.25; Year 10:1.0. (Price: LE 0.30/kg).

5/ Fourteen percent of average gross revenues. Source: ADS Economics Working Paper No. 85, 1982.

6/ LE 1,200 for four years at 12% annual interest.

Source; SFPP Farm Management Data.

Table 2.13
Financial Analysis: Farm Equipment
(LE)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
<u>A. Costs</u>					
Investment (PTO sickle mower)	1,500	-	-	-	-
Spare parts	118	118	118	118	118
Maintenance	150	150	150	150	150
Lubricants	12	12	12	12	12
Fuel	20	20	20	20	20
Labor	100	100	100	100	100
Total	1,900	400	400	400	400
<u>B. Benefits</u>					
Wheat Harvest (140 f X LE 10)	1,400	1,400	1,400	1,400	1,400
Cotton stalk mowing (120 f X LE 6)	720	720	720	720	720
Total	2,120	2,120	2,120	2,120	2,120
Net benefits before financing	220	1,720	1,720	1,720	1,720
<u>C. Financing</u>					
Loan Receipts					
Medium term <u>1/</u>	1,150	-	-	-	-
Debt Service					
Medium term interest	138	92	46	-	-
Medium term principal	384	383	383	-	-
Net financing	628	(475)	(429)	-	-
Net benefit after financing	848	1,245	1,291	1,720	1,720

1/ LE 1150 for three years at 12% annual interest.

Source: SFPP farm management data; S. Shepley and Z. Wissa, Agricultural Mechanization Cost Model, AID Agricultural Mechanization Project, 1983.

Table 2.14
Financial Analysis: Other
(LE)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
A. Costs										
Investment <u>1/</u>	20,000	-	-	-	-	-	-	-	-	-
Equipment	4,190	-	-	4,190	-	-	4,190	-	-	1,397
Operating costs (same as broilers)	<u>28,755</u>									
Total	52,945	28,755	28,755	32,945	28,755	28,755	32,945	28,755	28,755	30,152
B. Benefits										
(same as broilers)	37,223	37,223	37,223	37,223	37,223	37,223	37,223	37,223	37,223	37,223
Residual value of investment	-	-	-	-	-	-	-	-	-	10,000
Total	<u>37,223</u>	<u>47,223</u>								
Net benefits before financing	(15,722)	8,468	8,468	4,278	8,468	8,468	4,278	8,468	8,468	17,071
C. Financing										
Loan Receipts										
Medium Term <u>2/</u>	10,000	-	-	-	-	-	-	-	-	-
Debt Service										
Medium term interest	1,200	900	600	300	-	-	-	-	-	-
Medium term principal	2,500	2,500	2,500	2,500	-	-	-	-	-	-
Net financing	6,300	(3,400)	(3,100)	(2,800)	-	-	-	-	-	-
Net benefits after financing	(9,422)	5,068	5,368	1,478	8,468	8,468	4,278	8,468	8,468	17,071

1/ Second floor addition to broiler house. Concrete structures valued at LE 20,000.

2/ LE 10,000 for 4 years at 12% annual interest.

Source: SFPP Farm Management Data.

Annex Table 2.15
Factors Used to Convert
Financial Values to Economic Values

<u>Item</u>	<u>Conversion Factors</u>	<u>Item</u>	<u>Conversion Factors</u>
Wheat	1.82	Layer/pullet feed <u>7/</u>	1.13
Maize	1.22	Starter/finish feed <u>7/</u>	1.15
Broad Beans	1.25	Poultry Meat <u>8/</u>	0.97
Lentils	1.15	Transportation	1.60
Tillage <u>1/</u>	1.30	Electricity/fuel <u>9/</u>	1.83
Seeding/planting <u>2/</u>	1.56	Lubricants/fuel <u>10/</u>	3.20
Weed Control <u>3/</u>	1.55	Milk	.72
Pest Control <u>4/</u>	1.83	Red Meat	.85
Fertilization <u>5/</u>	1.83	Dairy feed concentrate <u>11/</u>	3.65
Baby chicks <u>6/</u>	1.14	Berseem <u>12/</u>	0.87
		Machinery	1.60

Unless otherwise indicated, all data has been based upon: IBRD, Report No. 4136-EGT, 1983.

- 1/ Based upon 50% machinery: $.5 + .5 \times 1.6$
2/ Based upon 75% seed materials: $.25 + .75 \times 1.75$
3/ Based upon 50% chemicals: $.5 + .5 \times 2.1$
4/ Based upon 75% chemicals: $.25 + .75 \times 2.1$
5/ Based upon 75% chemicals: $.25 + .75 \times 2.1$
6/ Source: Undersecretariat for Agricultural Economics, MOA
7/ Based upon 55% maize content for layer/pullet and 70% for starter/finish
8/ Source: ADS: Economics Working Paper No. 122, 1983
9/ Based upon 33% electricity and 66% fuel: $.33 \times 1.54 + .66 \times 2.0$
10/ Based upon 40% lubricants and 60% fuel: $.40 \times 15.0 + .60 \times 2.0$
11/ Source: ADS Economics Working Paper No. 138, 1983.
12/ Based upon opportunity cost of growing wheat in place of berseem on one feddan.

Following are absolute farmgate and economic prices for selected inputs and outputs during 1982/83 cropping season. All prices in LE per metric ton unless otherwise indicated (Conversion rate for economic prices was \$1.00 = LE 1.10).

	<u>Farmgate</u>	<u>Economic</u>
Wheat	86	157
Maize	93	113
Broad Beans	235	294
Lentils	437.5	503
Fertilizer (Am. Nitrate)	90	189
Milk (cow/water buffalo)	300/510	220/370
Red Meat (live calf)	200/head	170/head
Dairy Feed concentrate	40	146
Berseem	20	17.4

ASSUMPTIONS

	CROPS	EGGS	BROILERS	PULLETS	COW	BUFFALO	EQUIP	OTHER	TOTAL
LOAN MIX (YEAR 1)	0.10	0.20	0.10	0.10	0.12	0.12	0.20	0.06	1.00
LOAN MIX (YEAR 2)	0.16	0.20	0.07	0.07	0.12	0.12	0.20	0.06	1.00
LOAN MIX (YEAR 3)	0.20	0.20	0.05	0.05	0.12	0.12	0.20	0.06	1.00
LOANABLE FUNDS FACTOR (YEAR 1)	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LOANABLE FUNDS FACTOR (YEAR 2)	1.60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LOANABLE FUNDS FACTOR (YEAR 3)	1.70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
REPAYMENT FACTOR	1	1	1	1	1.00	1.00	1.00	1.00	1.00
LOAN SIZE (LE)	100	700	3000	6000	0.25	0.25	0.33	0.25	
INDIVIDUAL FARM BENEFITS					1200	300	1150	10000	
YEAR 1	223	1802	36111	28289	100	45	2120	36111	
YEAR 2	0	1802	36111	28289	764	630	2120	36111	
YEAR 3	0	1802	36111	28289	946	583	2120	36111	
YEAR 4	0	1802	36111	28289	959	581	2120	36111	
YEAR 5	0	1802	36111	28289	886	939	2120	36111	
YEAR 6	0	0	36111	28289	1183	815	0	36111	
YEAR 7	0	0	36111	28289	1153	630	0	36111	
YEAR 8	0	0	36111	28289	1010	648	0	36111	
YEAR 9	0	0	36111	28289	786	869	0	36111	
YEAR 10	0	0	47311	40989	1196	630	0	46111	
YEAR 11	0	0	0	0	0	550	0	0	
YEAR 12	0	0	0	0	0	1286	0	0	
INDIVIDUAL FARM COSTS									
YEAR 1	83	1446	59440	49767	1503	640	1970	57040	
YEAR 2	0	1206	32850	22173	684	588	470	32850	
YEAR 3	0	1206	32850	22173	684	588	470	32850	
YEAR 4	0	1206	37040	24367	684	588	470	37040	
YEAR 5	0	1206	32850	22173	684	588	470	32850	
YEAR 6	0	0	32850	22173	684	588	0	32850	
YEAR 7	0	0	37040	24367	684	588	0	37040	
YEAR 8	0	0	32850	22173	684	588	0	32850	
YEAR 9	0	0	32850	22173	684	588	0	32850	
YEAR 10	0	0	34247	24367	684	588	0	34247	
YEAR 11	0	0	0	0	0	588	0	0	
YEAR 12	0	0	0	0	0	588	0	0	
TOTAL CAPITAL (YEAR 1)	7000000								
TOTAL CAPITAL (YEAR 2)	10000000								
TOTAL CAPITAL (YEAR 3)	3000000								

LOAN MIX= PERCENTAGE VOLUME OF CAPITAL FUNDS LENT IN EACH ENTERPRISE CATEGORY.

LOANABLE FUNDS FACTOR = NUMBER OF TIMES A LOAN IS MADE IN ONE YEAR.

REPAYMENT FACTOR= PERCENTAGE OF LOAN REPAYED BY JANUARY 1ST OF THE FOLLOWING YEAR.

OLD MONEY= CAPITAL FUND OF PREVIOUS YEAR MULTIPLIED BY REPAYMENT FACTOR.

NEW MONEY= ANNUAL ADDITION OF NEW LOAN FUNDS TO PROJECT, COMPUTED BY MULTIPLYING ANNUAL NEW MONEY FACTOR BY TOTAL CAPITAL FUND.

CAPITAL FUND= NEW MONEY + OLD MONEY.

LOANABLE FUNDS= CAPITAL FUND MULTIPLIED BY LOANABLE FUNDS FACTOR.

NUMBER OF LOANS= LOANABLE FUNDS DIVIDED BY LOAN SIZE (EXCEPT FOR POULTRY + PULLETS LOANS, WHICH ARE MULTIPLIED BY 5 AND 3, RESPECTIVELY, BEFORE DIVIDING INTO LOANABLE FUNDS, SINCE FARMERS TAKE OUT 5 BROILER AND 3 PULLET LOANS PER YEAR).

TOTAL FARM BENEFITS= INDIVIDUAL FARM BENEFITS MULTIPLIED BY NUMBER OF LOANS.

TOTAL FARM COSTS= INDIVIDUAL FARM COSTS MULTIPLIED BY NUMBER OF LOANS.

YEAR 1	CROPS	EGGS	BROILERS	PULLETS	COW	BUFFALO	EQUIP	OTHER	TOTAL
OLD MONEY (YEAR 1)									
NEW MONEY (YEAR 1)	700000	1400000	700000	700000	840000	840000	1400000	420000	7000000
OLD + NEW MONEY (YEAR 1)	700000	1400000	700000	700000	840000	840000	1400000	420000	7000000
CAPITAL FUND (YEAR 1)	700000	1400000	700000	700000	840000	840000	1400000	420000	7000000
LOANABLE FUND (YEAR 1)	1050000	1400000	700000	700000	840000	840000	1400000	420000	7000000
NUMBER OF LOANS	10500	2000	47	39	700	2800	1217	42	17345
TOTAL FARM BENEFITS									
YEAR 1	2341500	3604000	1685180	1100128	70000	126000	2580870	1516662	13024339
YEAR 2	0	3604000	1685180	1100128	534800	1764000	2580870	1516662	12785639
YEAR 3	0	3604000	1685180	1100128	662200	1632400	2580870	1516662	12781439
YEAR 4	0	3604000	1685180	1100128	671300	1626800	2580870	1516662	12784939
YEAR 5	0	3604000	1685180	1100128	620200	2629200	2580870	1516662	13736239
YEAR 6	0	0	1685180	1100128	828100	2282000	0	1516662	7412070
YEAR 7	0	0	1685180	1100128	807100	1764000	0	1516662	6873070
YEAR 8	0	0	1685180	1100128	707000	1814400	0	1516662	6823370
YEAR 9	0	0	1685180	1100128	550200	2433200	0	1516662	7285370
YEAR 10	0	0	2207847	1594017	837200	1764000	0	1936662	8339725
YEAR 11	0	0	0	0	0	1540000	0	0	1540000
YEAR 12	0	0	0	0	0	3600800	0	0	3600800
TOTAL FARM COSTS									
YEAR 1	871500	2892000	2773867	1935383	1052100	1792000	2398261	2395680	16110791
YEAR 2	0	2412000	1533000	862283	478800	1646400	572174	1379700	8884357
YEAR 3	0	2412000	1533000	862283	478800	1646400	572174	1379700	8884357
YEAR 4	0	2412000	1728533	947606	478800	1646400	572174	1555680	9341193
YEAR 5	0	2412000	1533000	862283	478800	1646400	572174	1379700	8884357
YEAR 6	0	0	1533000	862283	478800	1646400	0	1379700	5900183
YEAR 7	0	0	1728533	947606	478800	1646400	0	1555680	6357019
YEAR 8	0	0	1533000	862283	478800	1646400	0	1379700	5900183
YEAR 9	0	0	1533000	862283	478800	1646400	0	1379700	5900183
YEAR 10	0	0	1598193	947606	478800	1646400	0	1438374	6109373
YEAR 11	0	0	0	0	0	1646400	0	0	1646400
YEAR 12	0	0	0	0	0	1646400	0	0	1646400

YEAR 2	CROPS	EGGS	BROILERS	PULLETS	COW	BUFFALO	EQUIP	OTHER	TOTAL
OLD MONEY (YEAR 2)	700000	1400000	700000	700000	210000	210000	462000	105000	4487000
NEW MONEY (YEAR 2)	1600000	2000000	700000	700000	1200000	1200000	2000000	600000	10000000
OLD + NEW MONEY (YEAR 2)	2300000	3400000	1400000	1400000	1410000	1410000	2462000	705000	14487000
CAPITAL FUND (YEAR 2)	2317920	2897400	1014090	1014090	1738440	1738440	2897400	869220	14487000
LOANABLE FUND (YEAR 2)	3708672	2897400	1014090	1014090	1738440	1738440	2897400	869220	15877752
NUMBER OF LOANS	37087	4139	68	56	1449	5795	2519	87	51200
TOTAL FARM BENEFITS									
YEAR 1	8270339	7458735	2441320	1593755	144870	260766	5341294	3138840	28649920
YEAR 2	0	7458735	2441320	1593755	1106807	3650724	5341294	3138840	24731476
YEAR 3	0	7458735	2441320	1593755	1370470	3378368	5341294	3138840	24722784
YEAR 4	0	7458735	2441320	1593755	1389303	3366779	5341294	3138840	24730027
YEAR 5	0	7458735	2441320	1593755	1283548	5441317	5341294	3138840	26698810
YEAR 6	0	0	2441320	1593755	1713812	4722762	0	3138840	13610490
YEAR 7	0	0	2441320	1593755	1670351	3650724	0	3138840	12494991
YEAR 8	0	0	2441320	1593755	1463187	3755030	0	3138840	12392133
YEAR 9	0	0	2441320	1593755	1138678	5035681	0	3138840	13348275
YEAR 10	0	0	3198507	2309252	1732645	3650724	0	4008060	14899189
YEAR 11	0	0	0	0	0	3187140	0	0	3187140
YEAR 12	0	0	0	0	0	7452113	0	0	7452113

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TOTAL FARM COSTS (YEAR 2)

YEAR 1	3078198	5985201	4018501	2803790	2177396	3708672	4953372	4958031	31693160
YEAR 2	0	4991806	2220857	1249190	990911	3407342	1184155	2855388	16899649
YEAR 3	0	4991806	2220857	1249190	990911	3407342	1184155	2855388	16899649
YEAR 4	0	4991806	2504126	1372796	990911	3407342	1184155	3219591	17670728
YEAR 5	0	4991806	2220857	1249190	990911	3407342	1184155	2855388	16899649
YEAR 6	0	0	2220857	1249190	990911	3407342	0	2855388	10723688
YEAR 7	0	0	2504126	1372796	990911	3407342	0	3219591	11494756
YEAR 8	0	0	2220857	1249190	990911	3407342	0	2855388	10723688
YEAR 9	0	0	2220857	1249190	990911	3407342	0	2855388	10723688
YEAR 10	0	0	2315303	1372796	990911	3407342	0	2976819	11063170
YEAR 11	0	0	0	0	0	3407342	0	0	3407342
YEAR 12	0	0	0	0	0	3407342	0	0	3407342

YEAR 3	CROPS	E665	BROILERS	PULLETS	COW	BUFFALO	EQUIP	OTHER	TOTAL
OLD MONEY (YEAR 3)	2317920	2897400	1014090	1014090	644610	644610	1418142	322305	10273167
NEW MONEY (YEAR 3)	600000	600000	150000	150000	360000	360000	600000	180000	3000000
OLD + NEW MONEY (YEAR 3)	2917920	3497400	1164090	1164090	1004610	1004610	2018142	502305	13273167
CAPITAL FUND (YEAR 3)	2654633	2654633	663658	663658	1592780	1592780	2654633	796390	13273167
LOANABLE FUND (YEAR 3)	4512877	2654633	663658	663658	1592780	1592780	2654633	796390	15131410
NUMBER OF LOANS	45129	3792	44	37	1327	5309	2308	80	58027
TOTAL FARM BENEFITS									
YEAR 1	10063715	6833785	1597691	1043013	132732	238917	4893759	2875844	27679456
YEAR 2	0	6833785	1597691	1043013	1014070	3344838	4893759	2875844	21603000
YEAR 3	0	6833785	1597691	1043013	1255642	3095303	4893759	2875844	21595036
YEAR 4	0	6833785	1597691	1043013	1272897	3084684	4893759	2875844	21601672
YEAR 5	0	6833785	1597691	1043013	1176003	4985402	4893759	2875844	23405496
YEAR 6	0	0	1597691	1043013	1570216	4327052	0	2875844	11413816
YEAR 7	0	0	1597691	1043013	1530396	3344838	0	2875844	10391782
YEAR 8	0	0	1597691	1043013	1340590	3440405	0	2875844	10297543
YEAR 9	0	0	1597691	1043013	1043271	4613753	0	2875844	11173572
YEAR 10	0	0	2093223	1511261	1587471	3344838	0	3672234	12209026
YEAR 11	0	0	0	0	0	2920097	0	0	2920097
YEAR 12	0	0	0	0	0	6827717	0	0	6827717

TOTAL FARM COSTS

YEAR 1	3745688	5483714	2629857	1834905	1994957	3397931	4547502	4542609	28177162
YEAR 2	0	4573554	1453412	817516	907885	3121849	1084937	2616141	14575294
YEAR 3	0	4573554	1453412	817516	907885	3121849	1084937	2616141	14575294
YEAR 4	0	4573554	1638794	898409	907885	3121849	1084937	2949829	15175256
YEAR 5	0	4573554	1453412	817516	907885	3121849	1084937	2616141	14575294
YEAR 6	0	0	1453412	817516	907885	3121849	0	2616141	8916803
YEAR 7	0	0	1638794	898409	907885	3121849	0	2949829	9516765
YEAR 8	0	0	1453412	817516	907885	3121849	0	2616141	8916803
YEAR 9	0	0	1453412	817516	907885	3121849	0	2616141	8916803
YEAR 10	0	0	1515221	898409	907885	3121849	0	2727397	9170760
YEAR 11	0	0	0	0	0	3121849	0	0	3121849
YEAR 12	0	0	0	0	0	3121849	0	0	3121849

YEAR	AID TECH ASSIST.	ELDGS	GOE SUPPORT	MIS	OTHER AID COSTS	TOTAL FARM COSTS	GROSS PROJECT COSTS	TOTAL FARM BENEFITS	NET
1	794000	8871000	915000	501000	725000	16110791	27916791	13024339	-14892452
2	794000	8871000	915000	376000	725000	40577517	52258517	41435559	-10822958
3	794000	0	915000	127000	725000	53961168	56522168	65192371	8670202
4	0	0	457000	0	0	40816136	41273136	59110723	17837587
5	0	0	457000	0	0	41130379	41587379	60061302	18473923
6	0	0	457000	0	0	37975088	38432088	55712553	17280464
7	0	0	457000	0	0	31656001	32113001	43889055	11776054
8	0	0	457000	0	0	26311753	26768753	30732177	3963424
9	0	0	457000	0	0	26140636	26597636	30069285	3471649
10	0	0	305000	0	0	25749864	26054864	31985543	5930679
11	0	0	305000	0	0	21626373	21931373	27612761	5681388
12	0	0	305000	0	0	14224502	14529502	18996966	4467464
13	0	0	305000	0	0	6529191	6834191	10372210	3538018
14	0	0	305000	0	0	3121849	3426849	6827717	3400868
TOTAL	2382000	17742000	7012000	1004000	2175000	385931249	416246249	495022561	78776312

.38597

Additional Notes: Individual farm costs and benefits are the financial costs and benefits in the activity budgets converted to economic values (see Table 2.15). Costs and benefits for the five crop budgets were averaged together. AID dollar and LE-eq. costs for TA, MIS and other AID costs are drawn from the project financial tables in the text and annex, exclude inflation, and were converted at \$1.0 = LE 1.15. An accounting ratio of 1.5 was applied to LE construction costs (based upon shadow rate calculation in IBRD, Trade Strategy and Investment Planning). One half of GOE support costs charged in Project Years 4-9, to represent continued extension assistance to the approximately 30,000 farmers receiving income in farm budget years 2-5; and 30% support cost for approximately 10,000 dairy and poultry farmers continuing to receive income in the out-years. Inflationary and non-inflationary increases in prices are assumed to affect benefits and costs equally. Residual (salvage) value of on-farm capital investments included within the total farmer benefits. Capital funds disbursements do not correspond exactly to text Table 6 (Schedule for Disbursements of Credit Funds) by year, because they are prorated by 12 months of use.

Annex 3
Summary of Evaluation Findings
and Response

Issues

1. Extension of the Project
2. Additional Credit Monies
3. Revolving Loan Funds
4. Improved Accounting and Information System
5. Completion of "Manualization"
6. Testing and Demonstration Function of Project
7. Role of Women
8. Need for Cost Analysis
9. Conflict between Financial and Economic Aspects of Project
10. The Interest Rate Issue
11. Rural Savings

This annex summarizes the findings of two major evaluations 1/ and presents the USAID/Cairo response to the recommendations. Implementation of the response - when there are operational implications - is discussed in the implementation section of the project paper supplement.

The first evaluation was an internal evaluation organized by the project and carried out in February 1983 by non-project agricultural and sociological consultants. The second evaluation was organized by USAID/Cairo and carried out in March 1983 by a team of direct hire USAID/Cairo employees and by outside consultants. The two evaluations agreed with each other on most points but differed somewhat in recommendations and on immediate further actions.

The major conclusion from both evaluations was that the project was highly successful in its efforts in credit and increasing farm income but that its ultimate influence on the credit and agricultural development system would be enhanced if it intensifies efforts along certain lines noted below.

1/ PBDAC and ACDI, Evaluation Report: SFPP, February 28, 1983; and USAID, External Evaluation of the SFPP, April 20, 1983.

Specific recommendations follow:

p. 2

1. The internal team recommended that the project be extended to December 31, 1988 and be expanded to cover 84 Village Banks. The external team was silent on exact dates for any extension or number of Village Banks to be covered. It was stated, however, that this was the type of development effort both sponsoring governments should continue to support, and recommended specifically that at least one District area be consolidated to test the system at a higher level of PBDAC management than the village.

Response.-- It is now proposed to extend the project one year beyond its current Project Assistance Completion Date of July 31, 1985, and complete consolidation in three districts by the new PACD of July 31, 1986. Beyond that date, any further U.S. assistance to agricultural credit, or experimental modes of extension will be provided through the sector support program now in preparation. By the end of the project, it is proposed to initiate project concepts and procedures in 38 Village Banks and 4 complete districts.

2. The internal team recommended an additional 224 million LE be authorized - in equal amounts from the GOE and the US - for project expansion. The external team was silent on exact amounts for any expanded activities from US or GOE sources but indicated the need for PBDAC to expand its internal financing. (See Issue # 10 on the "interest rate" issue which is critical to a self sustaining credit program).

Response.-- For the balance of this project new capital for the credit fund of 20 million LE are proposed, LE 10.0 million to be financed from U.S. sources and LE 10.0 million from Egyptian sources. About 13 million LE is available from prior capitalization of the loan fund.

3. Both evaluation teams recommended that all project loan funds revolve for project lending during the length of the project.

Response.-- According to the Project Agreement, all loan repayments are to be returned to the PBDAC for integration into their traditional bank operation. However, in practice, the PBDAC has permitted all SFPP short-term loan funds to revolve for further project lending. USAID has included in this proposed project paper amendment a requirement that all loan monies (short, medium and long term) be placed in a revolving fund for re-lending.

4. Both evaluation teams recommended that an improved accounting and management information system be installed in at least one complete District and as many Village Banks as soon as possible.

Response.-- The proposal - as set forth in the project supplement - is to establish the new MIS in 22 Village Banks and their supervisory entities.

5. Both evaluation teams urged completion of development and installation of an improved credit delivery system with standard written procedures, i.e. "manualization".

Response.--This concept is now embodied in the total MIS system, which will be installed in the 22-VB consolidated area. Banks which are part of the SFPP program but not scheduled to receive data processing equipment will use standard loan procedures.

6. The project set out to develop a number of documents such as (a) records for "cooperating" farmers who receive more intensive farm management advice to compare with "participating" farmers who receive mainly credit/inputs; (b) farm enterprise budgets; (c) yield data and other farm output measures; (d) farm profit and loss statements and balance sheets; (e) accounts that could reveal the costs and returns to banking under the new technical assistance and liberalized credit procedures to compare with normal procedures.

The data base derived from these documents would contribute to (a) direct improvement of credit procedures and selection of farm enterprises to promote, and (b) recommendations regarding possible government organization structures and systems that would improve the system of inputs, information and credit delivered to farmers in an economical fashion.

Both evaluations pointed out the need to improve the farm record keeping component of the project. The external evaluation placed stress upon the need to carry out studies that compared project areas, and variations of the credit/inputs and extension efforts within project areas, to control groups. As it may not be possible to replicate all aspects of the project nationwide the project could shed light on which aspects might appear to be more critical than others for agricultural development. The external evaluation viewed this test and demonstration effort as a major function of the project.

Both evaluations recommended additional resources for these project components.

Response.--The test and demonstration effort is a major function of the project, but it is not the central function. The purpose of the current project as described in the Log Frame, is to develop and apply an improved credit and input system to small farmers. An important aspect of any development project is the evaluation and analysis of the approach taken. It is therefore proposed in this project supplement that additional resources be made available to the evaluation and analysis portion of the project. Proposals are being sought from professional economic research entities familiar with Egypt development needs, its resource limitation and its farm service organizations, for follow up studies of baseline surveys as well as other issues (See Section IV).

7. The external team recommended that more attention be paid to the role of women in Egyptian agriculture and the use of project resources to better serve women borrowers.

Response.--The project clearly has had an extremely beneficial impact upon women's incomes.

With the combined LE 33.1 million loan fund under the original project and proposed amendment, some 25,000 farmers will receive loans for poultry and livestock activities, including family egg enterprises (See Annex 1). As the economic analysis in Annex 2 demonstrates, these enterprises are quite profitable: the gross increase in family incomes of the 4,400 farmers taking out egg production loans is on the order of LE 2.5 million per year.

Several studies 1/ have shown the direct link between poultry and dairy production and women's income on traditional small farms. Estimates of the percentage of work time spent on livestock production by women range from 40 to 70 percent. On the very smallest farms (0-1 feddan), returns to women's labor in the livestock enterprise have ranged as high as twice the prevailing average daily wage rate in rural areas 2/.

Nevertheless, the concern was expressed in the external evaluation that female farmers might be cut out of this traditional source of income by the extension and marketing functions performed by the male head of family. In response to this and other concerns regarding women in the external evaluation, an anthropologist has been contracted under the SFPP to ascertain the degree to which the project has addressed the needs of women and how they could be met more fully .

Preliminary results from her study based upon interviews with Village Bank employees, male and female extension agents, and male and female farmers indicate that: (1) the proportion of women taking out loans has increased from two to eight percent as a result of the project; (2) more women are beginning to deal directly with the Village Bank; (3) communication between male extension agents and female farmers does take place; (4) 90% of farm women made household economic decisions with their husbands or alone; and (5) that at least 55% kept all the money made from their SFPP-funded enterprises. These preliminary findings suggest that the project has already gone a long way in meeting female farmer's needs.

1/ I. Soliman, J.B. Fitch and N.A. El-Aziz, The Role of Livestock Production on the Egyptian Farm, ADS Economics Working Paper No. 85, 1982; N.S. Hopkins, Annual Husbandry and the Household Economy in Two Egyptian Villages, AUC Social Research Center, 1980; D. de Treville, Food Processing and Distribution Systems in Rural Egypt:, IFPRI, 1983.

2/ Soliman, Fitch and El-Aziz, op.cit; and Soliman and A.M. Ragab, An Economic Study of Livestock on Traditional Farms in Some Egyptian Villages, ADS Economics Working Paper No. 126, May, 1983.

However, to ensure that continuing improvements are made in the services provided to female farmers under the project, several steps are being taken. The Management Information System (MIS) contains a gender-disaggregated personnel skills profile that will enable the PBDAC's Training Division to improve its staff development programs. It also will make it easier for the Training Division to guarantee female employees an equal opportunity to participate in these programs. Data collected on farm enterprises will also be gender-disaggregated. This will provide project management with a means of determining how well the needs of female farmers are being met, and where improvements in services can be made (such as stepping up the number of visits by extension agents). It will be an extremely valuable step towards improving the general understanding of women's important role in Egyptian agriculture.

8. The external evaluation mentioned that little cost analysis had been carried out to help determine if the project approach was cost effective, or what it might take to recover project costs.

Response.—The economic internal rate of return of 39% against capital and all of the program costs indicate the approach is cost effective given the enterprise mix being financed, and provided that the very high rate of repayment to date can be maintained on all loans.

Financing a self-sustaining, and growing, credit program is a distinct possibility, but this is dependent upon actually recovering some of the net farm income stream to increase capital and cover operational costs of the bank.

It is possible to estimate how much the interest rate (currently 10 percent) paid by farmers would have to be increased in order to recover incremental operating costs of doing business the SFPP way.

The normal annual operating costs for an average Village Bank with a staff of six persons is about 9,720 LE, including some equipment upkeep, and maintenance and depreciation on buildings. The SFPP increases costs to about LE 25,010 including salary incentives, transport, hiring subject matter specialists, carrying out farm production demonstrations but excluding U.S. technical assistance and construction of banks and warehouses (See Annex Table 10.5). The incremental costs are LE 15,280. With annual capital fund of LE 870,000 per Village Bank as projected in the project, it would take an increase of about 2 points of the annual interest rate to cover these incremental costs of doing business.

9. The external evaluation recommended that any extension of the project should clarify the conflict between the "micro" (in terms of the individual farmers) and "macro" (in terms of the general economy) objectives of the project. This conflict is best exemplified by the recent decision by SFPP staff to limit water buffalo and cow loans to the provision of improved breeds, since it was felt that provision of loans

for ordinary balady breeds would only exacerbate the competition between clover and other crops. Meanwhile, the demand for loans for water buffalo and cattle continues to be very high because of financial profitability, subsistence reasons, 1/ and because livestock are a major source of women's income (see issue #7).

Response.--The financial and economic analysis in Annex 2 clearly shows the difference between financial and economic returns on investments in broiler and dairy enterprises.

USAID/Cairo believes further support of the entire range of small farmer investments under the SFPP program is justified for three reasons:

(a) The project that this paper seeks to amend is not solely an agricultural credit activity. Rather it is designed to develop and test methods and procedures for improving the efficiency in the use of the limited resources available for the provision of credit to small farmers. A diversified loan portfolio disbursed through a small segment of the PBDAC system serves the role of testing system improvements and is required, under this project, in much the same way that water is required to test and measure improvements in the design of irrigation pumps.

(b) This project continues to be a pilot program oriented towards small farmers. The original intent of the program was to demonstrate, among other things, an improved system of banking and credit. To facilitate this it was believed that farmers under the program should be permitted to take out loans in any area perceived by them as having income-producing potential. The Project Paper clearly states that "farmers will select the activities to be financed" (p. 21). The total number of farmers taking out loans under the SFPP program (including the proposed supplement) comprises less than three percent of Egyptian farmers.

(c) A justification has been made on economic grounds for continued, and even increased, investment in dairy production from water buffalos in Egypt provided the investment is accompanied by improved breeding measures on small farms. This has also been discussed in Annex 2.

1/ Ownership of water buffaloes is perceived by farmers as a hedge against inflation (de Terville, op.cit) and provides a substantial part of family subsistence needs in the form of dairy and meat products (Soliman, Fitch and El-Aziz, op.cit). See also: H. Alderman and J.V. Braun, Impact of Egyptian Food Ration and Subsidy System, IFFRI, 1983, draft).

Briefly, the argument is that Egyptian small farmers raise the overwhelming majority of large ruminant animals, primarily for milk, power, meat and manure (in descending order of importance). Because of relatively low feed and labor costs in comparison to large commercial enterprises, milk may be produced at an economic cost which may range from 20 to 40 percent above the value of milk reconstituted from powder (often imported on concessional terms from the E.E.C.). It is believed that increases in technical efficiency, brought about by improved breeding, veterinary care and management, could bring unit production costs more in line with import prices, thereby permitting Egypt to approach comparative advantage in milk production. ^{1/} It is, therefore, clearly desirable that only improved breeds, as well as veterinary/extension assistance, be provided to farmers taking out livestock loans under the SFPP program.

10. Both evaluations mentioned the desirability of charging market interest rates under the program.

Response.--The financial viability of banking institutions is greatly enhanced if the opportunity cost of money is charged to borrowers. Conversely, subsidized interest rates require a continued need for public funds. The system thus restricts generation of new capital funds and may result in unintended benefits and costs, depending upon who recovers the credit.

The PBDAC's normal short term interest rates--now called "commissions"--is effectively 5% per year. The charge is a fixed fee, thus the farmers may end up paying a higher real rate than if they pay back early (but presumably they hold off payments until they are due). In any event, capital is underpriced. The reasons for this are unclear but most likely stem from a (misplaced) sense of social justice.

The SFP project charges double the normal PBDAC rate. The plan is to increase the rates to 14% in May 1984. The latter rate would be about a point over current estimates of cost of capital for the government, and one point under the estimated average rate of inflation.

Furthermore, the PBDAC has agreed to place about LE 10 million, or two-thirds of its portfolio in the 22-VB area to be consolidated under this amendment, under the SFPP credit system. This amount is currently

^{1/} This argument is most fully developed in: M.T. El-Zaher, Milk Production in Egypt, PhDthesis, Ain Shams University, 1982. Also relevant are: Soliman, El-Zaher and Fitch, op.cit., and Soliman, Fitch and El-Aziz, op.cit. lent at subsidized rates (6-7%), but will be lent at SFPP rates in the future (See Annex 1).

Therefore, this project may be seen as a first definitive step toward rationalization of interest rate policy. The project affords an opportunity for both AID and the GOE to buy into an on-going program in which higher interest rates are charged rather than merely discussing the matter in a policy dialogue.

11. Neither of the evaluation teams directly addressed the savings issue. The question has been posed whether or not the SFPP should assist its Village Banks to develop increased savings thereby increasing loanable funds.

Response.-- Because the primary emphasis of the project has been upon the credit delivery system, the SFPP staff has only given peripheral attention to savings. The evidence is clear that savings are showing an upward movement in the Village Banks under the project, but this is the case throughout the PBDAC banking system. On a national scale, savings and deposits increased by 40 per cent (from LE 150 to 210 million) and depositors increased by 20 per cent (from 400,000 to 500,000) from 1981 to 1982. The PBDAC expects a steady increase in savings and deposits of no less than 15 per cent per year.

Savings have increased at an equal or higher rate in the project banks, but comparisons between them and non-project banks are difficult because of demographic and other differences between Village Bank areas. Below is a comparison of the 27 original project banks to the national average in 1982:

	<u>Aver.</u> <u>Savings (LE)</u>	<u>Aver.</u> <u>No. Depositors</u>	<u>% 1/</u> <u>Nat. Av.</u> <u>Savings</u>	<u>% 1/</u> <u>Nat. Ave.</u> <u>Depositors</u>
Assiut VBs	395,833	621	130%	83%
Sharkia VBs	333,333	981	109%	131%
Qalyoubia VBs	235,135	1,518	77%	203%

The PBDAC has recently undertaken a national campaign to promote thrift and encourage more clients to use the Village Bank facilities for savings. USAID supports these efforts, but is hesitant to burden the Small farmer Project in this amendment with a task not central to the expected outputs of the project as listed in the Log Frame.

1/ Average savings in 745 VBs was LE 305,400 per bank and average no. depositors was 745 in 1982.

Annex 4Request for Waiver of Section 636 (i)
and Source/Origin for Motorcycles

The success of the project depends on the increased effectiveness of the local extension service and Village Bank employees. Under the original project the provision of motorcycles to the extension agents and the Village Bank farm analysts in the 27 project villages has been critical to increasing extension effectiveness and the ability to reach the farmer.

The type of motorcycle appropriate for this use (100 c.c./2 stroke) is not manufactured in the United States or Egypt and, consequently, must be obtained of Code 935 origin, such as Japan or Western Europe.

For this reason, it is requested that a waiver be granted to the U.S. Manufacture requirements in Section 636(i) of the Foreign Assistance Act, to permit the purchase of approximately 124 motorcycles with an estimated cost of \$216,000 from an A.I.D. Geographic Code 935 origin and, if necessary, of Code 935 source.

Signature of the Project Authorization Amendment containing a waiver of Section 636(i) of the Foreign Assistance Act for the purchase of approximately \$216,000 worth of motorcycles from Code 935 sources or origin will constitute a finding that special circumstances exist justifying a limited waiver of the Section, and constitute a certification that exclusion of procurement from Free World Countries other than the cooperating country or countries included in Code 941 would seriously impede attainment of U.S. foreign policy objectives and objectives of the Foreign Assistance Program.

- Outputs:**
1. Improved Bank Management System
 - (a) Bank Information System operating;
 - (b) Staff more thoroughly trained
 2. Improved Credit System
 - (a) Lending interest rates at or near market rates;
 - (b) Savings rates at or near market rates;
 - (c) Studies completed on means to generate loan funds from the capital market.
 3. Farm Management System Developed
 - (a) A wider variety of farm enterprises being undertaken in the project area than elsewhere;
 - (b) Advisory services being supplied by Bank or in cooperation with Extension Services.
 4. An Improved Input Storage and Handling System Operating in Pilot Districts
 - (a) Incremental business operating at or near market prices;
 - (b) Costs of storage being recovered from users.
 5. An Analysis Done with Respect to:
 - (a) Comparisons of project area to control area;
 - (b) Comparisons to other credit programs which lack provision of extension or farm management services;
 - (c) Recommendation for organization of national, cost effective, extension and credit and input system.
 6. An Updated Training System Operating
 - (a) Men receiving training for skilled jobs;
 - (b) Better personnel records on skills existing, those needed and plans to meet requirements in place.

- Magnitude of Outputs:**
1. Complete system implemented in 22 Village Banks and 3 District Banks.
 2. Village level system implemented in 11 Village Banks.
 3. 162 cooperating farmer groups (4000 farmers) formed and assisted by 38 farm mgmt. teams.
 4. 140 storage facilities upgraded, 50,000m²/new facilities constructed.
 5. 1 lang. facility upgraded, 50 Village Bank officials trained, 300 Village Bank employees trained.

1. Project records.
2. Bank records.

- Assumptions for achieving outputs:**
1. Supplies available to Bank at correct time in amounts needed.
 2. Transport to governmental depots available.
 3. Bank remains willing to experiment with new approaches and cooperate with Extension.
 4. High level policies continue to favor more open distribution of inputs.
 5. Farmers willing to participate even though their costs of capital and inputs are higher than their neighbors.

- Inputs:**
1. Technical Assistance
 2. Loan Funds
 3. Training
 4. Storage Facilities and Equipment
 5. Building program
 6. O&M Staff

- Implementation Target (Type and Quantity)**
1. Approximately 600 work months.
 2. \$22,132 million (AID); \$14,830 million (O&M)
 3. Construction, participant training, in-country training contract
 4. New construction, land, handling equipment, repairs.
 5. Furniture and equipment for 38 bank buildings.
 6. 913 work-years.

1. Project Records
2. Bank Records.

- Assumptions for providing inputs:**
1. Bank and Extension continue to provide personnel above normal staffing levels.
 2. M&A continues to support growth of loanable funds.

**PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK**

Title of Project:
From FY 79 to FY 87
Total U.S. Funding 49 million
Date Prepared: 6/5/84

Project Title & Number: Small Farmer Production 26J-0079

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal The broader objective to which this project contributes:</p> <p>Increase productivity of small farms leading to greater small farmer income and employment.</p>	<p>Measures of Goal Achievement: Farmers in project area increase outputs by 1988 as follows:</p> <ol style="list-style-type: none"> 1. Cooperating farmers, initial 9 groups: 25% 2. Remaining cooperating farmers in 38 villages: 20% 3. Cooperating farmers in 18 villages: 15% 4. Other farmers in 38 villages: 10% 5. Farmers in remaining villages of the 8 project districts: 5% 	<ol style="list-style-type: none"> 1. Project baseline and control group studies. 2. MDA data. 	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> 1. National price policies remain as are, or move closer to free market. 2. Demonstration effect and governmental district level changes provide significant benefit to farmers in non-project villages.
<p>Project Purpose:</p> <p>To develop and apply an improved credit and input system which is replicable.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status. By 1988:</p> <p>Effective system operating in 3 complete districts ready to be applied on a larger basis. System enables farmers to increase yields and income by 10%, by providing greater access to inputs, encouraging use of new technologies, and increasing farmer service by the Bank and Extension Service.</p>	<ol style="list-style-type: none"> 1. Project baseline and control group studies. 2. Bank data. 3. Results of outside evaluations, 1 and 2. 	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. Bank employees will remain motivated to be responsive to small farmer needs. 2. Bank remains principal actor in input delivery system in near term. 3. New technologies exist and new ones will be developed that can be applied by farmers.

6/12

060016

Annex 6

p. 1

Aug. 4, 1983.

Mr. M Stone,
Director,
AID Mission
Cairo, ARE.

ACTION TO	<u>DIS</u>	<u>ASS</u>
ACTION TAKEN	_____	DATE <u>6/24</u>
NAME	_____	INITIALS _____

Dear Mr. Stone,

I am pleased to receive your letter dated July, 1983 reviewing our conversation on Thursday night, July 28 and to illuminate any misunderstanding which may occur on each side:

- 1 - As we can see the function of the MOA regarding water irrigation is that the MOA is responsible for on farm water use, and there is a close coordination between the MOA and the MOI regarding this matter. Meanwhile the water use and management activities can be coordinated with both Ministries without any sensitivity. As a rule water distribution is main responsibility of the MOI.
- 2 - Concerning the poultry project funds which AID is planning to deobligate, we would agree to do so if funds were to be reobligated to the agriculture sector and to the ADS project to allow the Horticulture sub-project to continue, or to the Agriculture Mechanization project under the credit fund. Otherwise, we think that the best use for this money is to procure the poultry equipment needed for the other three poultry industry in the villages and for small farmers.
- 3 - In regard to the EMCIP project we feel that the construction component of the project is our first priority and we have already spent a great deal of time and money to accomplish what we have done. I have instructed Dr. Momtaz the EMCIP project director to accelerate the construction process.
- 4 - As we have agree that credit, commodities and training are the three of our top priorities. However, I fully support the finish up of the design of the expanded "Small Farmer" project under a sector fund for credit to increase the level of funding about \$ 50 million annually. Meanwhile I will write to Dr. Wagih Shindy to allow for Dr. Bremmer and Dr. Lu Eisgruber to continue their work and to finish the project design.
- 5 - As for extension my position still as was indicated in my July 13 letter to you and it will be covered by the SAS project. However I would think the 5 year project is a

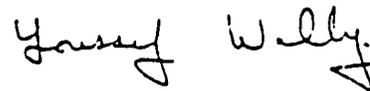
Received 6/22/83
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ARAB REPUBLIC OF EGYPT
MINISTRY OF AGRICULTURE
MINISTER'S OFFICE

reasonable time in order to get noticeable results, and as you know in the development process programs it should not be tailored to funds. On other word, we will review the project regardless it's cost as far as it is economically and financially feasible.

Finally, I welcome Mr Pressley to discuss the KNBS-GMM contract in order to reach acceptable solution to both parties.

Cordially Yours



Dr. Youssef Wally
Minister of Agriculture
& Food Security

Annex 7Recommendation to Authorize Purchase of Egyptian Pounds with U.S. Dollars

Over the life of the Project activity contemplated under this amendment, U.S. dollar funds will be used to support local currency costs of the project. Dollar funds will be used for project support costs for credit and extension and for local costs of technical assistance.

Justification: Dollar funds used in conjunction with Egyptian pound costs represent an additional real resource to the Egyptian economy and provide means for speedy implementation and offer some incentive for the GOE to implement new initiatives that it might otherwise not be able to undertake. U.S.-owned local currency is fully programmed and is not available for use in this project. In any event, the use of existing U.S.-owned local currency would add no additional real resources to the economy. Also given the need of the GOE to restrict the growth in money supply to correspond to the real growth of resources in the economy, the inflationary impact of using U.S.-owned local currency would have to be offset by reduced GOE disbursements to other programs. Maintaining the fiscal balance is also required under the terms of the current International Monetary Fund (IMF) Standby Agreement with Egypt which the U.S. and other donors have strongly supported.

Annex 8

Statutory Checklist Update

The following updates the project checklist included as Annex VI in the original Project Paper of 1979. All original responses remain valid, with modifications and additions given below. The update has been prepared with reference to FY 82 appropriation sections. However, it reflects guidance in State 325099 for purposes of compliance with the FY 1984 Continuing Resolution.

A. General Criteria for Project

1. FAA Sec. 612(d) Does the U.S. own excess foreign currency of the country, and, if so, what arrangements have been made for its release?

OMB has determined that Egypt is a near-excess foreign currency country for FY 1984 (OMB Bulletin 84-2 dated 26 October 1983). A Section 612 (B) determination was made by the Acting Deputy Administrator for the time of project authorization.

2. FAA 118 (c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16? Does the project or program take into consideration the problem of the destruction of tropical forests?

Yes

N/A

3. FAA 121 (d). If a sahel project, has a determination been made that the post government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollar or local currency generated therefrom?)

N/A

4. Sec. 611 (a) (1). Prior to obligation in excess of \$100,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

(a) The necessary planning and cost estimates have been completed.

(b) Yes

5. If project is capital assistance, and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and regional Assistant Administrator taken into consideration the country's capability to effectively maintain and utilize the project?

Yes. See 611 Determination, p. 27

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. Funding Criteria for Project

1. Economic Support Fund Project
Criteria

a. FAA Sec. 534. Will ESF funds be used to finance the construction or the operation or maintenance of, or the supplying of fuel for, a nuclear facility?
If so, has the President certified that such use of funds is indispensable to nonproliferation objectives?

No

b. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

N/A

c. FAA Section 531 (c).
Will assistance under this chapter be used for military or paramilitary activities?

N/A

Annex 9Second Amendment to the
Project Authorization

Name of Country: Arab Republic of Egypt
Name of Project: Small Farmer Production
Number of Project: 263-0079

1. Pursuant to section 531 of the Foreign Assistance Act of 1961, as amended, the Small Farmer Production Project for the Arab Republic of Egypt was authorized on the 17th of July 1979 and amended on the 25th of April 1980. That authorization is hereby further amended as follows:

a. The first paragraph of the authorization is amended to read as follows:

"Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended ("the Act"), I hereby authorize the Small Farmer Production Project (the "Project") for the Arab Republic of Egypt (the "Grantee") involving planned obligations of not to exceed Forty-Nine Million United States Dollars (\$49,000,000) in Grant funds (the "Authorized Amount"), subject to the availability of funds in accordance with the AID/OYB allotment process, to help in financing foreign exchange and local currency costs of the Project."

b. Section a. Source and Origin of Goods and Services is amended to add to paragraph (3) thereof:

"I hereby find that special circumstances exist which permit procurement of approximately 124 motorcycles worth approximately \$216,000 from Geographic Code 935 source and origin under funds provided by the Second Amendment to the Project Grant Agreement, and certify that exclusion of procurement from Free World Countries other than the cooperating country or countries included in Code 941 would seriously impede attainment of U.S. foreign policy objectives and objectives of the Foreign Assistance Program.

c. Paragraph (2) of Section d Covenants, is amended as follows:

1) Subclause (a) is deleted and the following text substituted therefore:

"Project loans financed under the Grant Agreement and made prior to May 1, 1984 shall be made at a rate of at least 8% for short-term loans up to 14 months, and at 10% for medium and long-term loans or at the prevailing rate, whichever is higher; all Project loans made after May 1, 1984 shall be at a rate of 14% or at the prevailing rate, whichever is higher."

2) Subclause (c) is deleted and the following text substituted therefore:

"Subsequent to the date of the Second Amendment to the Grant Agreement all project loan funds shall be kept in revolving funds at the Village Bank level and repayments of loans made to farmers under the credit component of the Project shall be placed in the same revolving funds and shall be available for reloan to farmers, except as provided in subclause (f) herein below.

3) A new subclause (f) is added, as follows:

"Up to one-third of the interest collected by a Village Bank on Project loans may be used to finance the added Village Bank administrative and operating costs of the SFPP Program."

2. The authorization cited above, as previously amended, remains in force. except as hereby further amended.

Table 10.1
Estimated Technical Assistance Costs
(S Costs)

<u>Line Item</u>	<u>Total to July, 31, 1985</u>	<u>Supplement</u>	<u>Total to July 31, 1985</u>
Salaries <u>1/</u>	1,935,700	430,000	2,365,700
Fringe Benefits <u>2/</u>	542,000	120,000	662,000
Travel & transportation <u>3/</u>	527,000	113,000	640,000
Consultant Fees <u>4/</u>	285,600	280,000	565,600
Training <u>5/</u>	316,000	200,000	516,000
Allowances <u>6/</u>	74,900	18,000	92,900
Equipment & Commodity <u>7/</u>	131,800	22,000	153,800
Other Direct Costs	<u>38,793</u>	<u>10,000</u>	<u>48,793</u>
Subtotal	3,851,793	1,193,000	5,044,793
Overhead <u>8/</u>	456,207	161,000	617,207
Total Dollars	4,308,000	1,354,000	5,662,000

(LE Costs)

Rent and Utilities	350,000	80,000	430,000
Appliances & furniture	42,000	5,000	47,000
Arabic lessons	10,000	-	10,000
In-Country Travel	88,000	30,000	118,000
Consultants Per diem	110,000	80,000	190,000
Temporary lodging	40,200	-	40,200
Sample surveys	80,000	-	80,000
Admin. & Sec. support	84,000	20,000	104,000
Communications	11,000	4,000	15,000
Training	230,000	200,000	430,000
Contingency	60,000	21,000	81,000
Total LE	1,105,200	440,000	1,545,200
(\$ equiv. @.83168)	(1,328,877)	(529,050)	(1,857,927)

- 1/ 9 persons long-term x 12 months = 108 person months @ \$3,981/month.
2/ 28% of salary
3/ Long-term personnel
4/ 47 person months @ \$5,957/month.
5/ 66 short-term participants @ \$3,000 each.
6/ Four percent of salaries.
7/ Village Bank furniture, office equipment and supplies.
8/ 13.5% of dollar costs for supplement.

Table 10.2

Estimated AID and GOF Costs of Agency (Storage)
and Village Bank Construction
(000 LE)

	<u>Assiut (#)</u>	<u>Qualub. (#)</u>	<u>Shark. (#)</u>	<u>Total</u>
Agencies	1,704 (28)	2,284 (38)	3,854 (65)	7,842 (131)
Village Banks	<u>1,405 (9)</u>	<u>1,405 (9)</u>	<u>1,405 (9)</u>	<u>4,215 (27)</u>
	3,109	3,689	5,259	12,057 <u>1/</u>
a. GOE Costs (1/2 Village Banks)				2,108
b. AID Costs (1/2 Village Banks)				2,107
c. AID Costs (Agencies)				<u>7,842</u>
Total Const. Costs				12,057
d. Total AID Costs (lines b & c)				9,949
funded under current project				5,644
funded under this amendment				<u>4,305</u>
Total				9,949

1/ Estimates by P. B. Sabbour, A & E firm.

Annex Table 10.3
Estimated Computerization Costs
For M.I.S.
(3 Governorates)

1. Standalone Systems - Basic Computer Hardware

<u>Qty.</u>	<u>Item</u>	<u>Estimated U.S. List Price</u>
1	Microcomputer, 128 KB w/keyboard, one 5 1/4 diskette drive and 10 MB fixed disk storage. Arabic language.	\$5,000
1	Monochrome Display (CRT)	500
1	Dot Matrix printer, 132 column, 160 CPS in draft mode	1,500
N/A	Accessories: UPS, cables, connectors, etc.	<u>1,000</u>
Subtotal Hardware		8,000
Spare Parts (15%)		1,200
Shipping (250 LBS X \$5)		<u>1,250</u>
Total Hardware		10,450
Software, packaged (operating system, language, data base spread sheet)		<u>2,500</u>
Total Site Cost Standalone Systems		12,950

2. Multi-User Systems

1	Network processor (6 station capability), 20 MB fixed disk, one 5 1/4" or 8" disk drive	8,000
2	Workstations, 64 KB, CRT, two 5 1/4" diskette drives (\$300 ea)	6,000
1	Dot Matrix printer	1,500
N/A	Other peripherals	2,500
N/A	Accessories: UPS, cables connectors, etc.	<u>3,000</u>
Subtotal Hardware		21,000
Spare Parts (15%)		3,150
Packaged Software		<u>4,000</u>
Total Site Cost Multi-User Systems		28,150

3. Total Costs

U.S. Dollars

Standalone Svstems (30 X \$13,000) (22 vS + 3 branches + 3 gov. + 2 spares)	\$390,000
Multi-user systems (4 X \$28,000)	112,000
Supplies (30 X 500 + 4 X 750)	<u>18,000</u>
Total U.S. Dollars	\$510,000
 <u>Egyptian Pound Costs (U.S. Dollar Equivalent)</u>	
System burn-in (6 p/m X \$2,000)	\$ 12,000
Software development	50,000
Maintenance (labor only) 2 yrs. X 7.5% X \$324,000 (hardware subtotal)	<u>48,000.</u>
	\$110,600
Total	\$620,000

4. Training Costs (U.S. Dollar Equivalent)

Consultants

(Fee and costs for development and subsequent refinement of computer software and advise on training methodology for the software)	70,000
Classroom Training (including per diem, instructor fees, rent)	25,000
Training by Consultancy (mostly one-on-one and trouble shooting, includes per diem, transportation, fees)	30,000
Materials (design and reproduction)	30,000
Supplies (for Village Bank Training Centers)	<u>16,000</u>
Total	171,000

Grand Total for MIS \$793,000

Annex Table 10.4

Estimated Costs for In-Country
Training, Farm Management/Extension
Team Support and Evaluation/Analysis

(LE Equivalent
except where noted)

A. In-Country Training

Extension Agents (courses on mechanization,
crop packages, fertilization, weed control, etc.) 36,000

Village Bank Personnel (courses on loan procedures
and processing, accounting management) 24,000

Equipment and Supplies (reproduction equipment with
related supplies) 60,000

120,000

B. Farm Management Extension

Farm Demonstration Equipment 500,000

Local TA (veterinarians, university professors, etc.) 200,000

700,000

C. Team Support

Village Bank furniture and office equipment 120,000

Project Office equipment and supplies 120,000

Local contracts ~~120,000~~

Transportation 180,000

600,000

D. Evaluation and Analysis

Final AID Project Evaluation \$ 50,000

Farm Record Analysis (U.S. Consultants) \$ 25,000

Evaluation of Credit/Extension/Input
problems (local contract) 225,000

300,000

Table 10.5

GOE Operating and Incremental
Costs for Average Village Bank
For One Year

(LE)

<u>A. Ordinary Operating Costs</u>	(Salaries)
VB Manager (100/mo)	1,200
Fin. Analyst (90/mo)	1,080
Accountant (80/mo)	960
Office Supplies, etc.	500 ^{1/}
Maintenance and depreciation	1,000 <u>^{1/}</u>
Branch Bank supervision (2 persons/ 6VBs @220/mo & \$160/mo)	760
Branch Bank support (8 persons/ 6VBs @100/mo).	1,600
Extension farm mgt. (2 persons @80/mo).	1,920
Governorate supervision (3 persons/6VBs)	700
Total Operating Costs	<u>9,720</u>

B. Incremental Costs Under SFPP

(ordinary personnel requirements)	(Salaries)	(Incentives)
VB Manager	-	960
Fin. Analyst	-	960
Accountant	-	960
Branch Bank supervision	-	760
Extension/farm mgt. (2)	-	1,920
Governorate Supervision	-	350
Subtotal	<u>-</u>	<u>5,910</u>
(added personnel)		
Fin. Analyst	1,080	960
Extension/farm mgt.	960	960
Extension trainer (160/mo/6VBs)	320	320
Veterinarian (100/mo)	<u>1,200</u>	<u>1,200</u>
Subtotal	3,560	3,440

Total Incremental Costs 2/ 12,910

1/ USAID estimates.

2/ Excludes other, currently U.S.-funded costs for local technical assistance (5,800), transport/equipment (3,300) and farm trial equipment (3,000) per VB, as well as U.S. technical assistance and GOE/AID-funded construction.

Source: SFPP Staff.