

A.I.D. PROJECT EVALUATION SUMMARY: PART I

A. REPORTING A.I.D. UNIT: **USAID/EGYPT**
 ES.#

B. WAS EVALUATION SCHEDULED
 CURRENT FY EVALUATION
 Yes X Delayed ___
 Ad Hoc ___

C. EVALUATION
 TIMING
 Interim X Final ___
 Ex Post ___ Other ___

D. ACTIVITY EVALUATED: **FARMER TO FARMER--AGRICULTURE COOPERATIVE DEVELOPMENT INTERNATIONAL (263-0102)**

E. ACTION DECISIONS APPROVED BY THE MISSION DIRECTOR	ACTION TAKEN	RESPONSIBLE PARTY	COMPLETION DATE
1- Carry out an assessment to determine how to enhance the role of core group farmers as active outreach agents.	Special Project completed	ACDI	12/1992
2- Coordinate program strategies and activities on an on-going basis with AGR.	Ongoing	ACDI	9/1992
3- Special Projects component should be directed toward providing information which directly benefits the refinement and implementation of the FtF program.	Ongoing	ACDI	9/1992
4- Conduct a study to implement an appropriate post-harvest handling and marketing module.	Special Project completed	ACDI	12/1992
5- Establish formal communication links with ARC & NARP/TT.	Ongoing	ACDI	11/1992
6- Provide USAID list and copies of video and slide-show programs produced to date and a list of topics planned for the future.		ACDI	2/1993

KGohar, HRDC/PVO (DRAFT) RParks, PDS/P RP
 TMackee, OD/HRDC/ET (DRAFT) RHandler, PDS/P RH
 DMiller, AD/HRDC (DRAFT) JMalick, OD/PDS/P JM

Approved: Robert Jordan 5/27/1993
 Robert Jordan, AD/PDS/P

G. EVALUATION ABSTRACT

The evaluation conducted of the ACIDI managed Farmer-to-Farmer program in Egypt has found the FtF Program to be an effective agent in providing new and appropriate technologies to Egyptian farmers. Working to cultivate a "core group" of leader farmers through intensive education and technical assistance activities, the FtF Program has constructed the basis and potential for an extensive outreach program. The principal output of the FtF Program is the creation of this group of core farmers as outreach agents. The FtF Program has focused more resources on the "education" of the "leader farmer", and fewer resources on facilitating the outreach process, or making the best use of the investment made in the creation of that "leader farmer". Although the "education" and "technology transfer" components were very successful, the evaluation found that expanding the sphere of influence beyond the "core group" of farmers to the greater Egyptian farmer population has not been emphasized. The remaining project resources should be focussed on facilitating the outreach capability of this "core group" of farmers.

The survey results showed the FtF Program is having a positive impact on farmers in the 10 governorates where the FtF Program is active. The greatest impact is felt directly by the approximately 600 farmers who have been recruited and are active in the program. Over 90% of these farmers have adopted at least one technology (the average farmer adopted two technologies) which was brought to them by U.S. Volunteers. At least 80% of the farmers in this "core group" have found the new adopted technologies to have resulted in increased operating efficiencies. The minimum financial impact, as measured in cost savings to achieve the same output, or increased yields attributed (by the farmer) to using the new technologies ranged from a low of 800 LE/farm/year to 529,200 LE/farm/year.

The significance of the technology transfer success is not only in the number of new specific technologies which have been adopted by farmers, but in the rate of technology transfer. This program has achieved a remarkably high rate of technology transfer and adoption. The FtF Program is complementing the services being provided through the MOA/ARC extension department. At the local, village level, the two programs are synergistically linked. The program must now focus on appropriate technical transfer to the larger community of Egyptian farmers.

The FtF needs a much greater emphasis on the outreach follow-on component of the program. It is unclear that "core group" farmers without promoting (simply because they have gone to the United States, or have had a U.S. Volunteer visit their farm), will actively engage in transferring their - new learned technology and experience (and associated benefit) to other farmers. Expansion of the FtF program should move in concert with new ARC initiatives in developing six regional research and extension centers.

H. EVALUATION COSTS

<u>Evaluation Team</u>	<u>Contract No.</u>	<u>Contract Cost</u>	<u>Source of Funds</u>
ACDI-Farmer to Farmer: Grant No. 263-0102-G-00-0066-00			
1. Burt Levenson	Purchase Order # 263-0102-G-00-2201-00	\$ 7,660.00 LE1,399.10	0102/FT-800
2. Ahmed El Behery	Purchase Order # 263-0102-G-00-2202-00	LE5,113.62	0102/FT-800

A.I.D. EVALUATION SUMMARY : PART II

I. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

PROJECT DESCRIPTION:

Project Goal: To increase food production and farmer income and improve the overall efficiency of Egyptian farms through the introduction of new technologies and better farm management practices via direct voluntary technical assistance at the grassroots level.

In January 1988, Agricultural Cooperative Development International (ACDI) launched the first phase of FtF in cooperation with the Ministry of Agriculture (MOA) and the Agricultural Research Center (ARC), using \$340,000 in USDA PL480 funds directly mandated by Congress for this purpose.

The basic concept was to recruit and place seasoned American farmer volunteers on Egyptian farms to work side by side with Egyptian farmers for 4 to 6 weeks at a time in order to introduce more advanced technologies and more economical farm management practices, thereby greatly increasing total farm productivity.

Working with MOA and the Extension Services, ACDI established a system for drawing up specific assignments and recruiting experienced American volunteer farmers to carry them out. During the 18 months period of this activity, 36 U.S. farmer volunteers completed 48 assignments in specializations related to dairy herd health management, dairy and livestock production, fruits, vegetables, honey production and plant pathology. By ACDI's calculation, the cost per month for this direct, on-farm technical assistance came to just 44% of the cost that USAID would incur if it hires a for-profit firm to provide similar technical assistance. The primary beneficiaries of the Phase I program were small and medium scale Egyptian farmers, a few large farmers, MOA staff members, Agricultural Extension Service personnel, and the member cooperatives of two national cooperative associations - the Potato Cooperative and the General Cooperative for Developing Animal Wealth and Products.

USAID/Cairo then funded a six-months extension (October 1989 March 1990) to maintain the continuity and credibility of the FtF program with Egyptian farmers while the proposal review for the current Phase II was being completed by USAID and the Ministry of International Cooperation (MIC). After the end of this grant, USAID/Cairo made a direct grant starting June 1990 to ACDI to carry out the activities currently under implementation.

EVALUATION PURPOSE:

To assess the success of the program in achieving its purposes of the FtF program half way through its LOP and recommend modifications to enhance its impact.

METHODOLOGY:

The evaluation was tasked with determining, to the extent possible given the time and resources available to the evaluation, what impact the FtF Program was having. To accomplish this, the evaluation team conducted a survey based on a stratified

random sample of 30 farmers from out of the "core group" of 556 participating farms. In addition, the evaluation conducted interviews with an additional 50+ farmers and other staff involved with implementing the FtF Program. "Rapid appraisal" methodology was used to provide further evidence of impact of the FtF Program during three field site visits to five of the thirteen governorates the FtF Program is active in.

FINDINGS AND CONCLUSIONS:

PRINCIPAL RECOMMENDATIONS

The FtF Program has been an effective agent in providing new and appropriate technologies to Egyptian farmers. Working to cultivate a "core group" of leader farmers through intensive education and technical assistance activities, the FtF Program has constructed the basis and potential for an extensive outreach program. The principal output of the FtF Program is the creation of this group of core farmers as outreach agents. The evaluation strongly recommends that remaining project resources be focussed on facilitating the outreach capability of this "core group" of farmers. The approach of using a composite of education and technical assistance strategies to build a foundation of leader farmers is working, and is complementary to the MOA extension service. The evaluation finds this a positive influence on the agricultural sector and recommends it be tied to the new regional ARC/extension strategy, and that the FtF program be expanded to additional governorates.

Major Conclusions:

Impact

The evaluation conducted a survey on a random sample of 30 farmers participating in the FtF program to quantify areas of impact resulting from the program. The survey results showed the FtF Program is having a positive effect on farmers in the 13 governorates where the FtF Program is active. The greatest impact is felt directly by the approximately 600 farmers who have been recruited and are active in the FtF program. Over 90% of these farmers have adopted at least one technology (the average farmer adopted two technologies) which was brought to them by U.S. Volunteers. At least 80% of the farmers in this "core group" have found the new adopted technologies to have resulted in increased operating efficiencies. In the absence of a predetermined control group of farmers from which to make comparisons, it is difficult to quantify the exact economic impact (or even financial impact) on the farmers in the FtF program of adopting these new technologies. However, in the course of conducting the evaluation, several examples of impact on farm operating systems were derived from interviews and farm visits. These are provided in the following Table (1). There is supporting evidence to show that these are not isolated examples of the impact of this FtF Program, but, rather, are indicative of the norm.

The real value of this FtF Program, (and potential for greatest impact) is in the outreach component. Developing a "leader farmer" with visits from U.S. Volunteer experts, sending the "leader farmer" to the United States, and providing for

organized fora in which the "leader farmer" can effectively disseminate his new knowledge about modern efficient farming systems is the crux of the FtF Program.

The FtF Program has focused more resources on the "education" of the "leader farmer", and fewer resources on facilitating the outreach process. The program, as originally designed and detailed in the ACIDI Technical Proposal (July, 1989), is targeted at outreach services more than either the Grant Agreement or current implementation plan. Subtle, but key, changes were made in the transition from Technical Proposal to Grant Agreement, which has resulted in relatively more emphasis being placed on the "technology transfer" end and less on the "outreach" end of the spectrum of activities the FtF Program has undertaken in the last two years. The evaluation found that while the "education" and "technology transfer" components to be very successful, expanding the sphere of influence beyond the "core group" of farmers to the greater Egyptian farmer population has not been emphasized. This has been due, in part, to a target driven approach toward implementing the FtF Program.

While the contractual agreement between ACIDI and USAID is in the form of a grant, the program has been managed more in line with a style conducive to a "cost plus" type of contract, aimed at achieving specific outputs, as opposed to implementing a strategy. As a result, this program shows symptoms of "tunnel vision" with respect to achieving the strategic goal of improving food production and income and overall efficiency of Egyptian farms through an outreach program promoting technology transfer.

The FtF Program has nonetheless shown that the approach described in the goal has a potential for tremendous impact on the Egyptian agricultural sector, especially if implemented in concert with other sectorial activities.

Achievement of Project Benchmarks and Grant Agreement Compliance

The FtF Program has been mostly successful in achieving the primary outputs as listed in the Grant Agreement, in some cases, actually exceeding the LOP targets in the first two years. Several key inputs into the FtF Program (namely, number of U.S. Volunteers and participant trainees) will not be provided in the same numbers as were anticipated in the Grant Agreement. This is due, in part, to travel restrictions during the Gulf War, and to a slower than expected start-up period for implementing these activities. Notwithstanding the reduction in actual and anticipated inputs, the Grant Agreement targets for major outputs most closely tied to impact (technologies transferred and number of farmers impacted by the program) have been achieved with less than one third the number of associated inputs.

At the start of the Phase II FtF Program, a management information system (MIS) was supposed to have been in place and provide baseline data on 1,000 farms. This data base was to have fueled an analysis of impact during the implementation of Phase II. The computerized version of the MIS which was in place at the start of Phase II was inadequate to provide either meaningful or sufficient data from which to conduct an impact analysis. The shortcomings of the MIS were recognized and the system was scrapped in favor of constructing a new MIS. The manual system of keeping track of FtF inputs and farmer progress was maintained. The new

computerized version of the MIS was only made operational in late 1991. The MIS system, while less than perfect, is now providing a foundation of data which will be valuable in monitoring short-term outreach activities, and potentially valuable to future economic researchers investigating impact of these technology transfer/outreach programs on farmer well-being. Additional resources in terms of staff time, training, and financial resources for some software programming revisions need to be allocated to make the MIS a truly "workable" system.

Intervention Strategy

The "technologies" being offered by U.S. Volunteers are appropriate; are being adopted by Egyptian farmers; and, are resulting in immediate positive benefits to the farmers. These technologies are for the most part, centered around improvements to the operations and management of the farm.

The core which the FtF program has focussed most of its resources are both economically important for Egypt and are utilizing relatively comparative advantage.

The FtF program is not restricted to "medium to large" farming operations, but is working with a broad spectrum of farms ranging from small farms of less than five feddan to, literally, the largest farming operation in Egypt. Farmers recruited into the "core group" are selected using criteria that identifies them as leaders. As such, they are generally better off than their neighbors.

The FtF Program is serving as a valuable training function for the MOA extension service. Extension agents are receiving "on-the-job" training, both from a technical perspective, but more importantly, from an interpersonal perspective. Extension agents are learning how to "talk" to farmers, so that their advice is received.

The U.S. Volunteers are serving as positive role models for the MOA extension agents to follow, and help to elevate the (low) stature of the extension agent in the eyes' of the farmer, providing a considerable boost in morale amongst this front line corps of government led interventions in the agricultural sector.

Finally, the FtF program is providing a valuable benefit of increasing the cultural understanding between the American and Egyptian people. This is a definite, although difficult to quantify, benefit which should not be valued lightly.

Recommendations:

The following list of prioritized recommendations are provided as a result of the evaluation.

1. A maintenance mechanism needs to be developed where-by farmers recruited into the "core group" continue to be active outreach agents after the FtF Program finishes with their initial "education", which may include the possibility of a second trip to the United States. "Core group" farmers should not be dropped when the program is no longer active in their area. Without continued encouragement to provide outreach services to their farming neighbors, the high level of investment made in the core farmer by the FtF Program is probably not justified in light of

alternative public investment opportunities.

Action: ACDI

2. ACDI and USAID, with support and/or input from the NARP MOA/ARC/TT component, should conduct a specific study to analyze factors which contribute to the successful creation of a leader farmer (outreach agent) and how the outreach process works. This study should be a three to six month effort by a local Egyptian consulting company (cultural understanding will be critical to this study). The results of the study should help to program specific strategies to enhance the outreach activities of the program and will feed into the technology transfer strategies being developed by the MOA/ARC.

Action: ACDI to work with USAID/ARD and MOA/ARC/TT to develop a SOW. ACDI to contract and manage the work.

3. A formal communication link should be established with the MOA/ARC/TT component to solicit their more active involvement with this program. Invitations should be offered to the MOA/ARC/TT component technical specialists to attend and participate in U.S. Volunteer activities (briefings, field farm visits, and debriefings). A representative from the MOA/ARC/TT component should sit on the FtF Program coordination committee. The FtF Program has thrived on its independence from MOA administration. To continue to achieve the high degree of success in rapid transfer of technologies it should remain independent.

Action: ACDI

4. USAID/ARD should take a close look at this project and integrate strategies of the FtF program (if not even specific components) into the new "focussed" NARP, especially in light of the revised MOA strategy to create six regional ARC's with linked and decentralized extension services. The project has at least a full year "head start" on planned USAID design activities in marketing and export promotion, and extension activities for a new follow-on project to NARP.

Action: USAID/ARD

5. MIS implementation should be adjusted to gather and manage information only on project inputs, technology transfer processes, and outreach activities.

Socioeconomic information about farmers should not be collected by this project. Action: USAID-ACDI Grant Agreement Amendment to change wording clarifying the several conflicting sections relating to MIS and "impact assessment". Action: ACDI and USAID.

6. In response to a growing farmer demand, the FtF program should increase subject matter expertise in the areas of marketing, export quality control, and post harvest handling and packaging.

Action: ACDI

7. The "Sub-Project" component of the project should be directed toward providing information which will directly benefit the refinement and implementation of the FtF program, and its focus on outreach. A clear "decision rule" should be adopted for deciding to undertake a "sub-project".

Action: ACDI to develop prioritized information needs list.

8. The project should transfer responsibility for production of outside presentations of the project. A good candidate for taking responsibility of video production is the ACDI administered Rural Agribusiness Educational Television Series project.

Action: USAID ACDI Grant Agreement Amendment.

Detailed Report on Tasks:

"Task One: Determine to what degree each of the following quantifiable ultimate outputs has been reached by FtF during the period of this evaluation."

There are nine specific outputs listed in the Grant Agreement which ACDI is responsible for achieving.

Ref: Grant/Attachment #2, "1.1.3 Project Outputs" These are outputs are addressed individually below:

* "Two core groups of 300 farmers each, one on the Delta and one in the New Lands, will have received an average of 10 visits apiece from U.S. volunteer farmers. "

1. On-farm visits by U.S. Volunteers, designed to identify and transfer specific technologies, is a key input into the education of the core farmer as an outreach agent. The target output level of 6,000 on-farm visit to have been achieved based on 180 U.S. Volunteers spending "approximately 80% of their time visiting and revisiting" farms in the "core group".

As of May, 1992, a total of 556 farmers have been recruited and maintained as "core farmers" in the FtF Program. This "core group" has received a total of 1,726 on-farm visits by U.S. Volunteers, an average of 3.1 visits per farmer. The FtF Program continues to recruit farmers into the "core" group, and is expected to have a total of 600 farmers by the end of the FtF Program. The U.S. Volunteers have, on the average, been able to visit 0.90 farms per day.

The current level of administrative and logistic support services at ACDI allow for a maximum of 4-5 U.S. Volunteers in different area specialties to be in the country at any one time. U.S. Volunteers have adhered to a schedule which emphasizes and focuses their activities on farm visits. If a full schedule for U.S. Volunteers were achieved during the remaining year of the FtF Program, a maximum of 1,620 additional farm visits would be possible. This is short of the 6,000 visits listed as a specific output in the Grant Agreement. (A total of 3,346 visits, or slight, more than half of the output target would have been achieved.) It should be noted that this lower level of achievement for number of farm visits has not resulted in fewer tech

MISSION COMMENTS

1- ACDI has undertaken substantive steps to implement recommendation No. 3. It has enhanced its communication lines with USAID's Directorate of Agriculture for coordination of strategies and activities. ACDI has also established formal communication links with the following Departments: ARC, NARP/TT, Foreign

Agricultural Relations (FAR), and the Department of Horticulture. These Departments receive C.V.s and itineraries of FtF volunteers prior to their arrival in Egypt. All volunteers meet with officials of the above Departments for coordination of activities and exchange of information.

There never existed a "coordination committee" for the FtF Program, only a committee for the selection of Egyptian farmers to receive training in the U.S. Since the inception of the program, the main MOA counterpart has been the MOA/FAR counselor. This recommendation is, therefore, met with the establishment of formal communication links with ARC & NARP/TT. It should also be noted that ACIDI distributes a total of approximately 25 copies of its quarterly progress reports to different Departments of MOA.

2- With respect to recommendation No. 8, USAID/HRDC agreed with ACIDI that it is not feasible at this stage to transfer the responsibility for video and slide-show productions outside the FtF program. ACIDI believes that these training instruments are an important part of the FtF Program. ACIDI will send a list and copies of programs produced to date, and a list of topics planned for the future.

3- The evaluation team attributed, at least in part, the program's failure to emphasize expanding its sphere of influence beyond the core group of farmers to USAID's target-oriented, management "style conducive to a 'cost plus' type of contract" instead of a grant. In other words, ACIDI was not given sufficient flexibility to implement a more responsive program.

The Mission disagrees fully with this. The subject grant agreement is typical of USAID's grant agreements with PVOs, which are required to state the methodology, benchmarks, and outputs of any given activity. The assumption is that in reviewing, requesting modifications, and finally accepting the FtF proposal, USAID came to an understanding with ACIDI on the acceptable methodology, inputs and outputs requisite for achieving the purpose of the grant. A grant agreement is more flexible than a contract in the degree of flexibility the grantee has with respect to the day-to-day implementation approach. However, this is not to say that monitoring the implementation of overall methodology, targets and objectives under the grant is equivalent to a management style conducive to a "cost plus" type of contract.

This said, Mission notes that one of eight specific objectives stated in the grant agreement is:

To build core groups of Egyptian farmers, cooperative members, and extension agents with new technical skills and knowledge who will continue to work with U.S. volunteer specialists and FtF staff to transfer new technology on a much larger scale in Egypt in the future.

This objective was conceived by ACDI and agreed to by USAID. It is specifically the flexibility accorded to grantees carrying out the work in the field which allowed ACDI to focus more resources on the education of leader farmers and fewer resources on facilitating the outreach process. If ACDI had requested reduction of the targets of other objectives in order to emphasize this one, USAID would have considered such a request.

LESSONS LEARNED

The FtF Program has shown that the approach described in the goal has a potential for tremendous impact on the Egyptian agricultural sector. The real value of this FtF Program, (and potential for greatest impact) is in the outreach component. Developing a "leader farmer" with visits from U.S. Volunteer experts, sending the "leader farmer" to the United States, and providing for organized fora in which the "leader farmer" can effectively disseminate his new knowledge about modern efficient farming systems in the crux of the FtF Program. The FtF Program has focused more resources on the "education" of the "leader farmer", and fewer resources on facilitating the outreach process, or making the best use of the investment made in the creation of that "leader farmer". Although the "education" and "technology transfer" components were very successful, the evaluation found that expanding the sphere of influence beyond the "core group" of farmers to the greater Egyptian farmer population has not been emphasized. While the program has thus far emphasized the education of a wide base of core group farmers, it now becomes the natural progression to develop and establish a systematic approach for promoting and facilitating their role in the outreach process over the remaining period of the current grant and any future subsequent phase(s).

Table 1
Examples of Impact on Net Farm Revenue

Measured

1.	Shaker Taha (Grape Farmer)	Reduced Fert, 6 Feddan	960/yr
2.	Mohamed Sherien Wahsh (Grape Farmer)	Reduced Fert, 8 Feddan	800/yr
3.	Mohamed Ahmed Abass (Dairy/Fattening)	Herd Mgt., 120 head	5,400/yr
4.	Balakaus Co-op Dairy (Dairy)	Feed Mix Improvement, 350 head	529,200/yr
5.	Mohamed Sarror (Fattening)	Feed Mix Improvement, 250 head	25,000/yr
6.	El-Said Aly (Beekeeping)	Various Mgt. changes, 500 hives	25,000/yr
7.	Attef Amer	Reduced Fert., 36 Feddan	5,040/yr
8.	Alla EL-Din Aly (Tomato)	Various Mgt. changes, 35 hot houses	7,000 yr
9.	Abd El-Kader Shahin (Tomato)	Reduced Fert, 3 feddan	1,500 yr
10.	Mohamed Ezzal (Dairy)	Various Mgt changes, 23 head	12,420 yr
11.	Mostafa El-Shrebiny (Grapes, Potato)	Various Mgt changes, 48 feddan	43,200/yr