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**Egypt
FARMER-TO-FARMER
PROGRAM:
Phase II**

MID-TERM EVALUATION

GRANT NO. 263-0102-G-00-0066-00

May, 1992

Executive Summary

The evaluation conducted of the ACDI managed Farmer-to-Farmer program in Egypt has found the project 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 project has constructed the basis and potential for an extensive outreach program. The principal output of the project is the creation of this group of core farmers as outreach agents.

The evaluation strongly recommends that remaining project resources be focused on facilitating and maintaining 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 complimentary to the MOA extension service. The evaluation finds this a positive influence on the agricultural sector and recommends it be tied, at the program level, with the new regional ARC/extension strategy. In concert with the MOA extension programs, the FTF program should be expanded to additional governorates with some modifications and improvements in the strategy and approach to outreach activities.

The evaluation was tasked with determining, to the extent possible given the time and resources available to the evaluation, what impact the project 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 project. "Rapid appraisal" methodology was used to provide further evidence of impact of the project during three field site visits to five of the thirteen governorates the project has been active in.

The survey results showed the project is having a positive impact on farmers in the 13 governorates where the project is active. The greatest impact is felt directly by the approximately 600 farmers who have been recruited and are actively participating 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, eleven solid examples of impact on farm operating systems were derived from interviews and farm visits. 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 real value of this project, (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 project.

The project 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". 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 project. In order to provide a long-term sustainable program of technology transfer, the "core group" farmer must become an institution in his own local outreach target area.

While the contractual agreement between ACDI and USAID is in the form of a grant, the project has been managed more in line with a style conducive to a "cost plus" type of contact, with its associated fixation on achieving specified contractual outputs, as opposed to implementing a strategy. The management of the grant as a "project" has detracted from the flexibility given to ACDI in implementing a more responsive program. The emphasis on "outputs", "achievements", and "impact assessment" prevalent throughout the project's documentation has clouded the vision of the program. As a result, the outreach component, and using "core group" farmers as active outreach agents, has received little attention.

In spite of this handicap, the project has 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.

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 fuelled 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. A 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 econometric researchers investigating impact of these technology transfer/outreach programs on farmer well-being.

Executive Summary

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 FTF program is a good program and should be continued. There needs to be much greater emphasis on the outreach follow-on component of the program. It is unclear that "core group" farmers without prompting (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 technologies and experience (and associated benefit) to other farmers.

The project is complementing the services being provided through the MOA/ARC extension department. At the local, village level, the two programs are synergistically linked. An expansion of the FTF program should move in concert with new ARC initiatives in developing six regional research and extension centers.

The FTF project is resulting in the rapid transfer of new technologies and farm management practices to Egyptian farmers in all socioeconomic classes. 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. Virtually every farmer in the "core group" (over 90%) has adopted at least one new technology introduced by the program in the past 24 months. From introduction to virtual adoption by the entire population exposed to the technology in less than two years is a significant accomplishment.

List of Acronyms

ACDI	Agricultural Cooperative Development International
ARC	Agricultural Research Center (Ministry of Agriculture)
CIP	International Center for Improvement of Potatoes
FA	Field Assistant
FTF	Farmer to Farmer Program
GOE	Government of Egypt
LOP	Length of Project
MIS	Management Information System
MOA	Ministry of Agriculture
NARP	National Agricultural Research Project
USAID/Cairo	Agency for International Development, Cairo Mission
VOCA	Volunteers in Overseas Cooperation Assistance

Definitions of Key Terms Used in the Report

"core group farmer"	A leader of a farm which has been recruited into the FTF program and is eligible to receive direct benefits from the program.
"technology"	A new utensil, machine, or procedure, method, or way of managing agricultural inputs.
"technology transfer"	Where one specific technology is adopted and implemented by at least one Egyptian farmer.
"U.S. Volunteer"	A technical advisor recruited through the VOCA subcontract with ACIDI to participate in the FTF program in Egypt.
Pronouns/Gender	Farmers are referred to in the masculine for convenience only and is not meant to represent any gender bias.

Acknowledgement

This Evaluation has been conducted under contract with USAID/Cairo by Dr. Burton Levenson and Mr. Ahmed El-Behery (USAID/Cairo Contract Numbers 263-0102-0-00-2201-00 & 263-0102-0-00-2202-00 respectively). The views expressed herein are entirely those of the authors' and do not represent the USAID/Cairo, the GOE, MOA, ACDI, VOCA, or any other institution or individual involved with the project, except where as quoted directly.

The evaluation team would like to thank the USAID/Cairo and ACDI for guidance and support in conducting the evaluation. Several field visits were made to the regional ACDI/FTF offices during the course of the evaluation. A large part of the success of gathering information used to determine impact of the project can be attributed to the long and tireless working effort of the regional ACDI field staff. The ACDI/Cairo office, likewise, provided numerous reports and opened their files to the evaluation team. ACDI management has been particularly responsive to requests for information and analysis about the project.

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Agricultural Cooperative Development International

Egypt Farmer-To-Farmer Program: Phase II

USAID/Cairo Specific Support Grant No. 263-0102-G-00-0066-00

MID-TERM EVALUATION

Conducted by

Mr. Ahmed El-Behery & Dr. Burton Levenson

May, 1992

Summary:

The FTF project 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 project has constructed the basis and potential for an extensive outreach program. The principal output of the project 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 complimentary to the MOA extension service. The evaluation finds this a positive influence on the agricultural sector and recommends it be tied, at the program level, with 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 project is having a positive effect on farmers in the 13 governorates where the project 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 project, but, rather, are indicative of the norm.

The real value of this project, (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 project.

The project 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 ACDI Technical Proposal (July, 1989), is targeted at outreach services more than either the Grant Agreement or current implementation plan. Subtle, but key, changes

Table 1. Examples of Impact on Net Farm Revenue

	<u>Farmer Name (Commodity)</u>	<u>Recommendation</u>	<u>Farm Size</u>	<u>Measured Minimum Level of Impact (LE)</u>
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.	EI-Said Aly (Beekeeping)	Various Mgt. changes,	500 hives	25,000/yr
7.	Attef Amer	Reduced Fert.,	36 Feddan	5,040/yr
8.	Alla EI-Din Aly (Tomato)	Various Mgt. changes,	35 hot houses	7,000/yr
9.	Abd EI-Kader Shahin (Tomato)	Reduced Fert.,	3 feddan	1,500/yr
10.	Mohmed Ezzal (Dairy)	Various Mgt. changes,	23 head	12,420/yr
11.	Mostaf EI-Shrebiny (Grapes, Potato)	Various Mgt. changes,	48 feddan	43,200/yr

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 project 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 project.

While the contractual agreement between ACDI and USAID is in the form of a grant, the project has been managed more in line with a style conducive to a "cost plus" type of contact, with its associated fixation on achieving specified contractual 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 technology transfer facilitated with outreach activities by a strong group of leader farmers.

In spite of this handicap, the project has 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

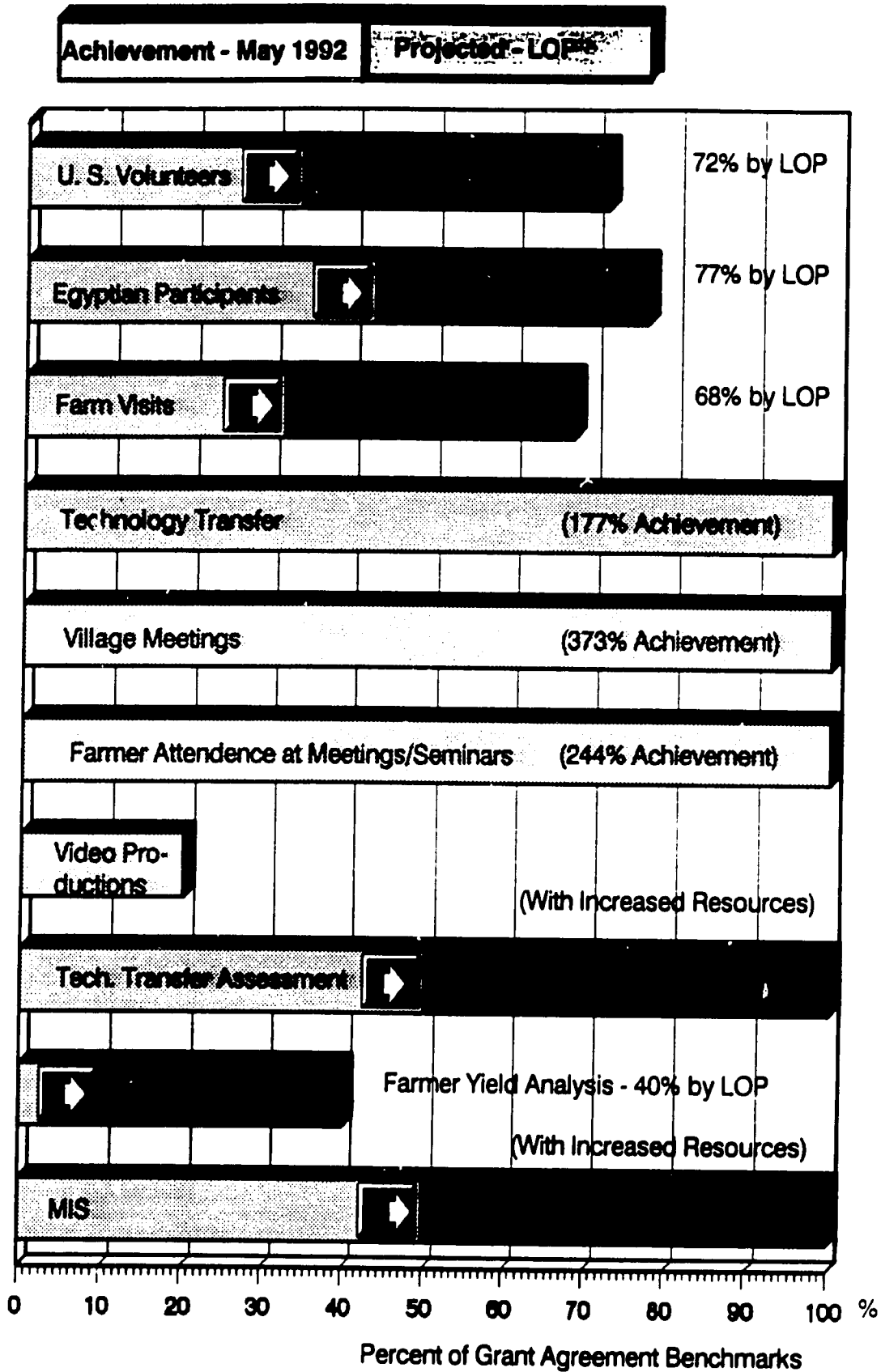
The project has been mostly successful in achieving the primary outputs as listed in the Grant Agreement, in some cases, actually exceeding the LOP targets in the first two years. Several key inputs into the project (namely, number of U.S. Volunteers and participant trainees) will not be provided in 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 econometric 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.

The following illustration shows progress-to-date and planned activities through the LOP for ten of the major project components. Figure (1).

Evaluation Report, Figure (1). Project Achievements

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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 crops which the FTF program has focussed most of its resources are both economically important for Egypt and are utilizing relatively complex production systems for which American farming expertise has a 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 project 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 moral 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 peoples. 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 exercise.

1. A maintenance mechanism needs to be developed where-by farmers recruited into the "core group" continue to be active outreach agents after the project 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

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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 project 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 project coordination committee. The project 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 FTF 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 be not be collected by this project.

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Action: USAID-ACDI Grant Agreement Amendment to change wording clarifying the several conflicting sections relating to MIS and "impact assessment".

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 video presentations outside 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 visits was 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 project. 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 ACIDI 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 project, 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 slightly 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 technologies transferred than what was projected in the implementation plan. The following, Figure (2), shows the number of farm visits by month and cumulative visits, both compared against the Grant Agreement benchmarks.

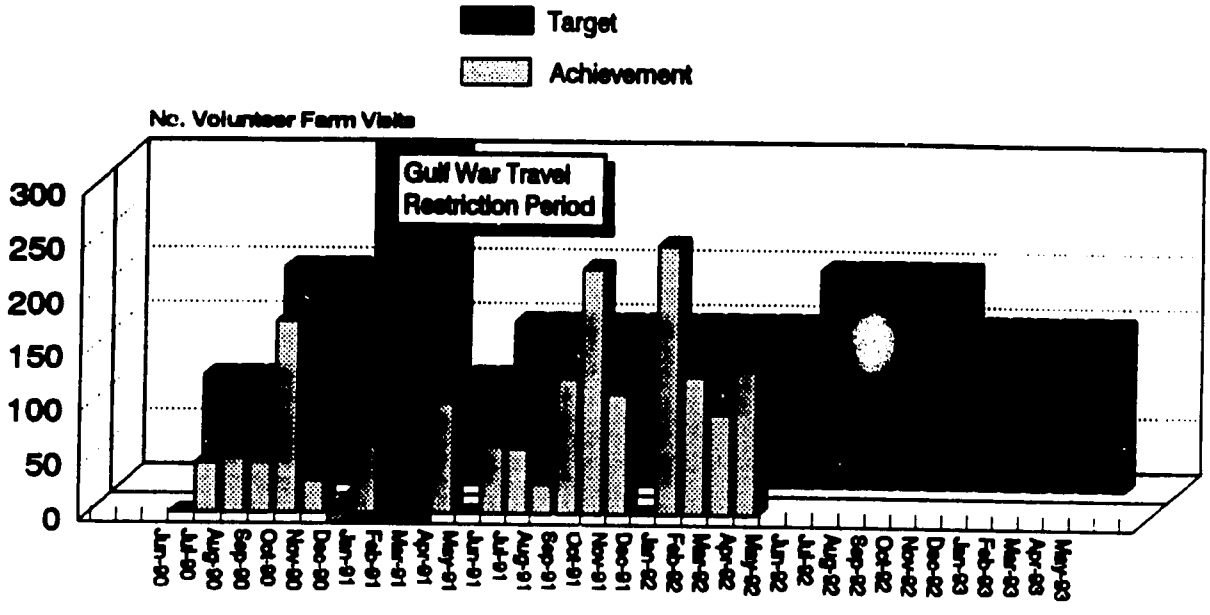
As of May, 1992, a total of 62 U.S. Volunteers have been recruited and arrived in Egypt. These U.S. Volunteers will have spent a total of 1,919 working days in country (an average of 31 days per volunteer, or slightly exceeding the target of 30 days per volunteer). The Grant Agreement anticipated a benchmark level of over 100 U.S. Volunteers to have arrived in Egypt by this time. Travel restrictions during a four month period in the middle of the Gulf War and the uncertain security situation before and after the War, prevented a number of U.S. Volunteers from actively participating in the FTF program. This factor, and a slower than expected recruitment rate during the initial start-up period of the project will, most likely, prevent the project from achieving a level of 180 U.S. Volunteers completing assignments in Egypt during the current LOP.

The Grant Agreement output level of 6,000 farm visits by 180 U.S. Volunteers was an over ambitious target, and under-estimated the time required for individual farm visits. Even with a full complement of 180 U.S. Volunteers, the achievement of 6,000 quality farm visits would not be possible. This target (if required) should be readjusted in light of the reduced number of volunteers and to reflect a more accurate time requirement for farm visit activities. Figure (3) illustrates the monthly arrival of U.S. Volunteers and cumulative arrivals, both

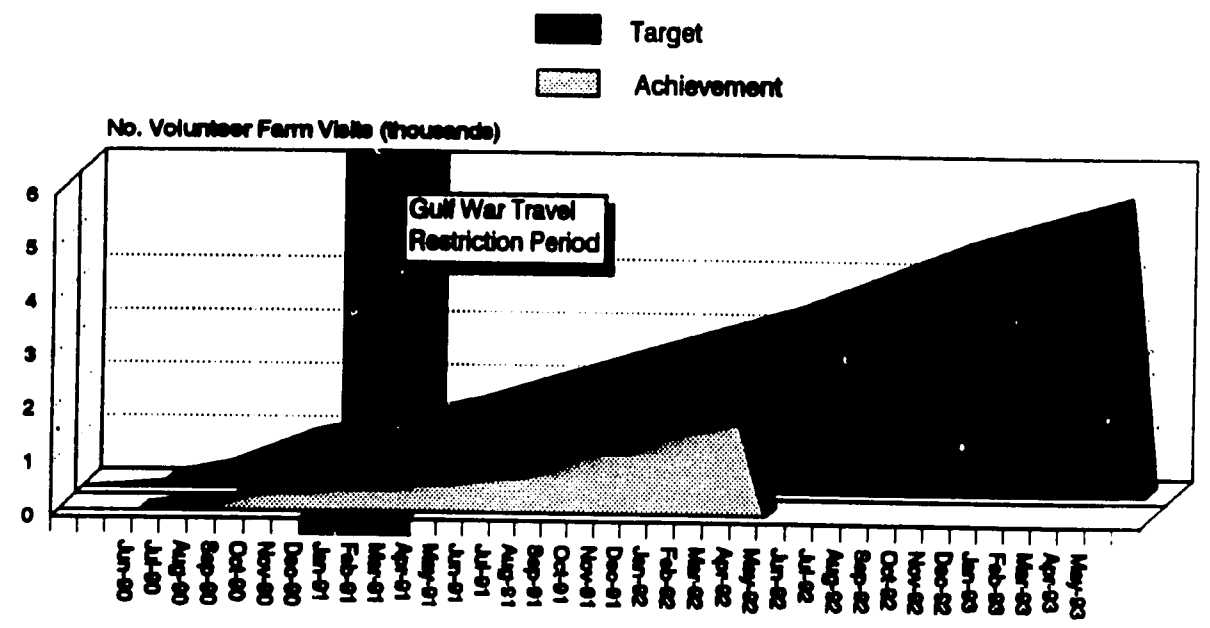
Evaluation Report, Figure (2): Achievement Figures

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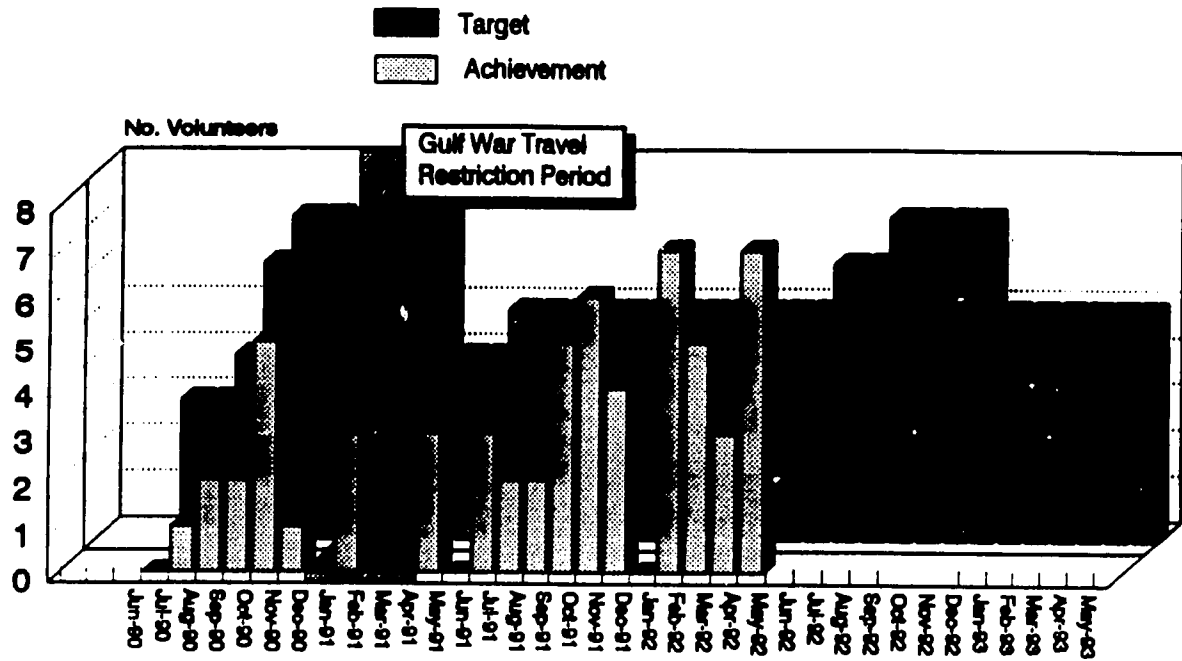
U.S. Volunteer Farm Visits - Time Series Analysis
Monthly Achievement vs. Target



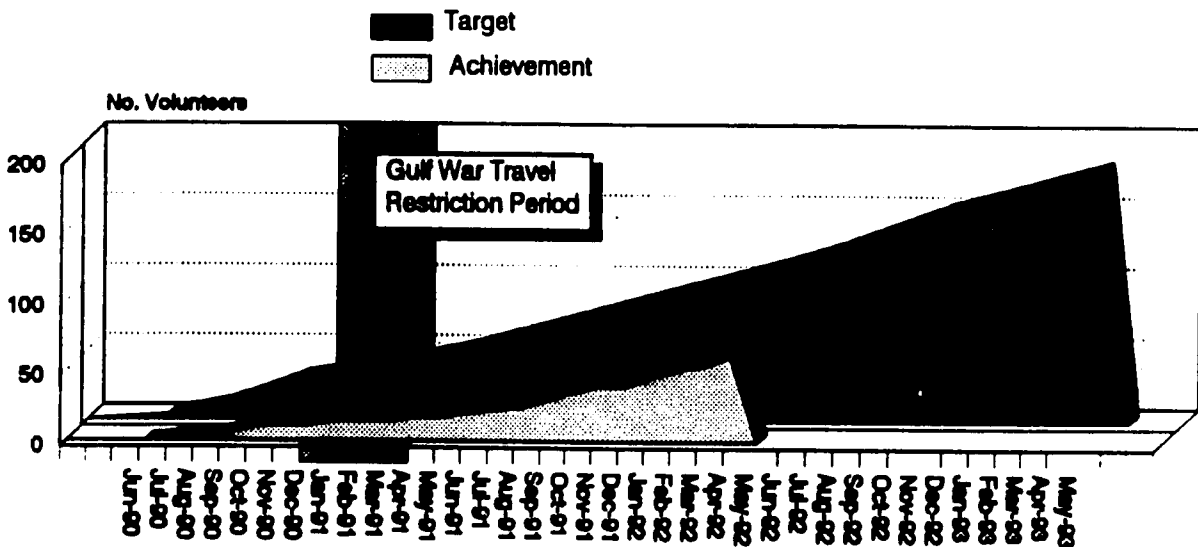
U.S. Volunteer Farm Visits - Time Series Analysis
Cumulative Actual vs. Target



U.S. Volunteer Time Series Analysis - Monthly Achievement vs. Target



U.S. Volunteer Time Series Analysis - Cumulative Actual vs. Target



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compared against targets in the Grant Agreement. The general trend of drop-off in arrivals during the Gulf War travel restriction period can easily be seen (even though there was one group which arrived during the middle of this period).

* *Approximately 5400 initial and follow-up farm visits will have been made by U.S. volunteers and/or ACDI FTF field staff to the core group.*

2. The meaning of this Grant Agreement output, as defined in the Grant Agreement, is ambiguous. If the outputs described in (1) above are achieved, at least 6,000 farm visits will have been made, more than is required for this output. The evaluation team interprets this output to mean strictly follow-up visits by ACDI Field Assistant (FA) staff.

Through April, 1992, the ACDI FA staff have made a total of 731 follow-up visits to farmers in the "core group". The achievement of the total number of follow-up visits (5,400) to farmers in the "core" group by ACDI FA staff is virtually impossible to achieve given the current staffing level and responsibilities of the FA staff. ACDI FA staff accompany U.S. Volunteers on their visits to the "core" farms, and to the United States to serve as translators and administrator managers for the Egyptian participants. With additional reporting requirements, data input into the MIS, and other responsibilities, including preparing for U.S. Volunteer visits, it is estimated that less than 20% of the FA staff time is available for follow-up visits. Considering that the average visit takes a minimum of two hours, this would mean that a maximum of 1,600 follow-up visits could be achieved in the remaining year of the project. (And this, only if the Field Assistants never missed a day, or accompanied Egyptian participants to the United States.)

The rationale behind "follow-up" visits is to, (1) monitor core farmer progress in adopting the recommendations of U.S. Volunteers, (2) provide a continued involvement in the project and, (3) to assess the relative impact of the program on the farm. All these functions are important and serve as a valuable feedback mechanism into the program. FA staff should be encouraged to continue efforts to make as many follow-up visits as possible. However, the Grant Agreement output target should be adjusted to reflect the resources available and time constraints on implementing this activity, or additional FA staff should be hired.

* *150 Egyptian core group farmers and 30 extension agents will have received on-farm training in the U.S. and begun a series of farm visits, village meetings and demonstrations of their own to pass on their newly acquired knowledge and skills.*

3. The U.S. Participant training program is designed to enhance the technology transfer process by providing the advanced Egyptian farmer with first hand experience in a modern and efficient agricultural production setting. The ACDI project has been successful in providing for this experience. Like other output targets in the Grant Agreement, this too, has been negatively impacted by the Gulf War and associated travel restrictions. In the two years of the project, a total of 77 Egyptian participants (61 farmers and 16 MOA extension

agents) have participated in this program. There are an additional 61 participant training slots programmed into the last year of the project. If these are all filled, the project will fall short of the target of 180 participant trainees.

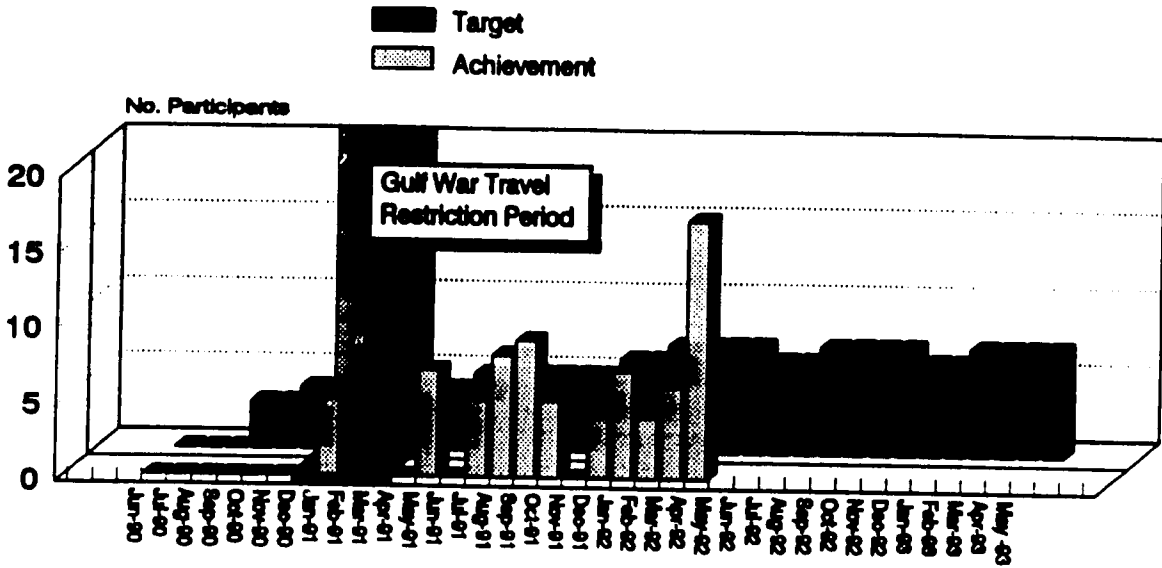
While the Gulf War contributed to the shortfall in achieving the program target, the fact that this component was a new initiative for ACDI which required setting up a procedure and support facilities in the United States, played a role in the shortfall. The first participants were sent to the United States during the eighth month of the project (almost in the middle of the Gulf War). Considering the selection process for participants in this program (field level screening based on performance, MOA selection committee approval, and administrative preparation), a 6-7 month lag period, from participant identification to actual departure for the U.S., is not unusual. The Grant Agreement implementation plan was unrealistic in assuming that participants would be available for travel to the United States in the third month of the project. Figure (4) shows the monthly number of departures to the United States and the cumulative departures, as compared with a back drop of Grant Agreement benchmarks.

- * *At least 100 new technologies will have been effectively transferred to Egyptian farmers.*

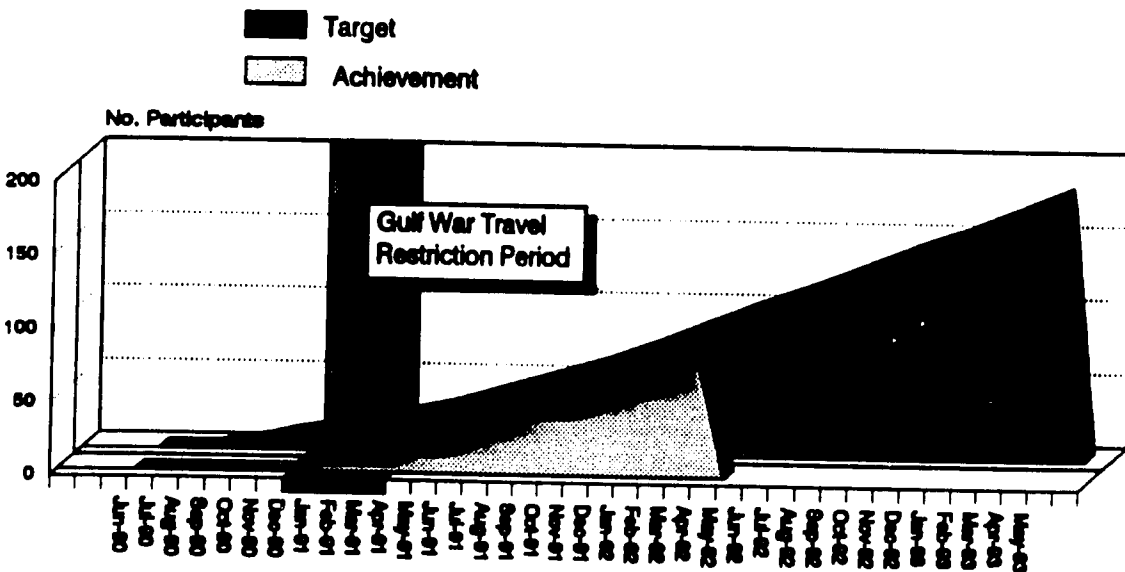
4. The U.S. Volunteers are the principle mechanism for transferring technology to their Egyptian counterparts in the agricultural sector. The project has been very successful at transferring specific technologies, most of them relating to farm operations and management of agricultural inputs. According to ACDI internal monitoring records and U.S. Volunteer reports, the project has been successful at transferring 177 specific technologies to farmers in the "core group". ACDI has documented 2,858 instances ⁽¹⁾ where these new technologies have been implemented on the "core group" of farms. The full range of technologies could have been applied to 5,198 opportunities for adoption within the "core group" of farmers, indicating an adoption rate of 55%; remarkably high, given the short time period between introduction and adoption. The high number of adoption instances and rate of adoption indicates the practical nature of the technologies and provides evidence that an immediate impact is being felt by the farmers. Figure (5) illustrates the achievement in successfully transferring new technologies.

(1) One "instance" of technology transfer is where one specific technology is adopted and implemented by one farmer. If one farmer adopts two different technologies, say, one involving fertilizer application and the other pesticide application on the same farm, it would count as two "instances" of technology transfer.

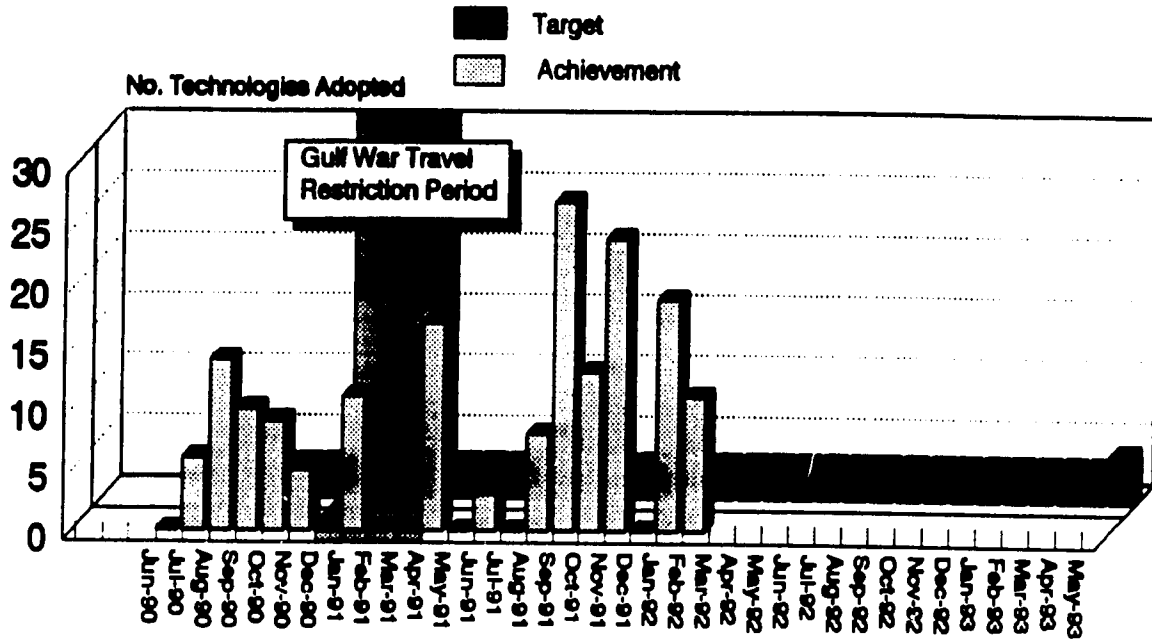
U.S. Participant Time Series Analysis - Monthly Achievement vs. Target



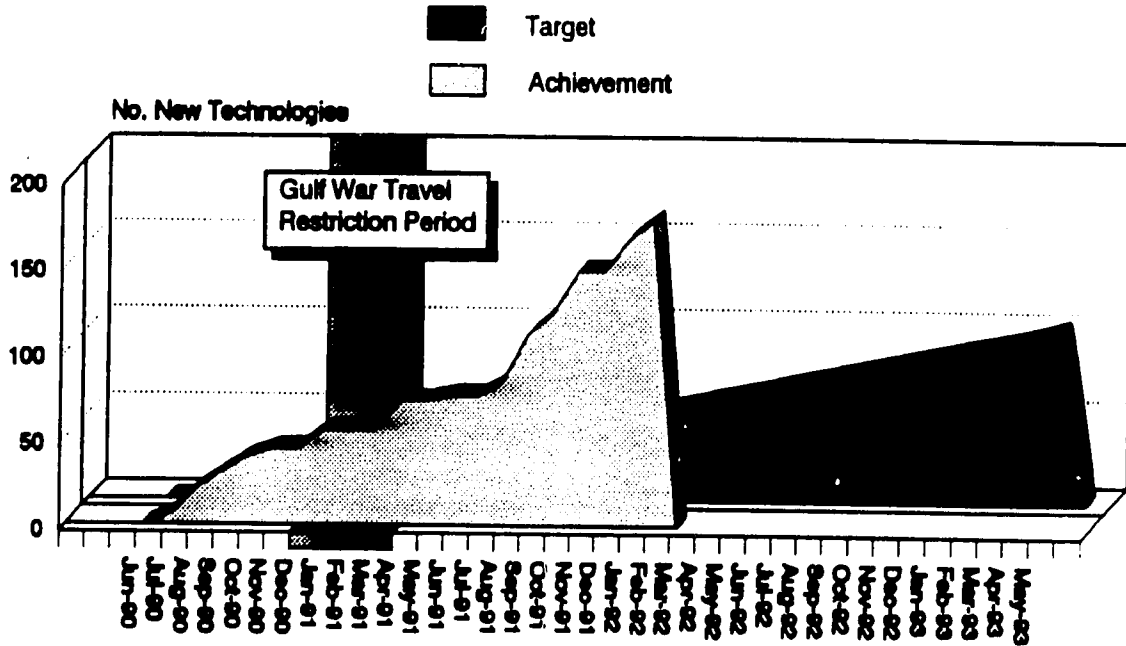
Participant Time Series Analysis - Cumulative Actual vs. Target



New Technologies Adopted by Farmers - Time Series Analysis; Monthly Achievement vs. Target



New Technologies Adopted by Farmers Time Series Analysis - Cumulative Actual vs. Target



- * *At least 180 village meetings and on-farm demonstrations will have been completed.*

5. The on-farm demonstration, village meeting, and seminar components of the project are designed to provide an organized forum for outreach/extension. The project has found these forums to be both popular and successful (as measured by attendance and requests for additional meetings). A total of 671 organized public extension activities (regional field office project records differentiate between on-farm demonstrations, village meetings, and seminars, but are reported together in one category) have been held, and attended by a total of 12,350 farmers and extension personnel. Both these achievements greatly exceed the targets of 180 meetings attended by 4,500 farmers.

During the Gulf War travel restriction period and associated drop-off in providing support to U.S. Volunteers, ACIDI field staff were able to refocus their efforts into disseminating the technical information and farm operating technologies recommended by the initial batch of U.S. Volunteers.

- * *At least 4,500 Egyptian farmers outside the core groups will have participated in village meeting and farm demonstrations and/or video presentations conducted by U.S. volunteers, FTF project staff, and/or returning Egyptian farmers and extension agents.*

6. Detailed attendance records are kept at all ACIDI organized public extension activities (on-farm demonstrations, village meetings, and seminars). While "core group" farmers are prominent in attendance, it is evident from both the total number of attendees and the nature of the forum, that at least 4,500 farmers outside the "core group" have attended at least one of the public extension activities. The evaluation sampled "core group" farmers and found that on the average, at least 60% of the "core group" farmers attended at least two FTF meetings, demonstrations, or seminars. From this statistic, it can be inferred that 11,682 attendees were outside the "core group" of farmers. These activities are being viewed by the farmers as extremely beneficial in providing very specific recommendations as to how they can improve farming operations, which result in lower costs and higher yields.

- * *At least 30 slide and video training programs will have been produced.*

7. Video is becoming an increasingly important media with which to reach the farmer in rural areas. To enhance the ability of ACIDI FA staff, "core group" farmers, and U.S. Volunteers to broadcast technical information to a wider audience of farmers, the project made provision for the production of 30 video and slide presentations. The project has found that video production is more complicated and staff intensive than originally thought, and as a result, only 6 have been produced to date (only 3 of these are original productions). ACIDI FTF staff have no comparative advantage for video production, in fact, virtually all the work is sub-contracted out to a local production house. Given the staff resources at ACIDI and the fact that much of the video production could be provided more

efficiently though the ACDI administered Rural Agribusiness Educational Television Series project, it is recommended that the target of 30 video and slide productions be reduced to a level commensurate with available staff resources.

- * *A formal assessment made of the degree to which U.S. volunteer farmer recommendations were effectively followed by their Egyptian counterparts.*

8. Tracking the implementation of U.S. Volunteer recommended technologies on Egyptian farms is a difficult and time consuming task. There are two stages to making an assessment; first, to gather the information and, second, to keep track of the information. The project has established a MIS capable of keeping track of information. This MIS is less than perfect, but workable. The greater effort of the two stages is to gather the information from the "core group" farmers (and others outside the "core group") to see if they are successfully implementing the new technologies. (It has already been noted the time constraints on the FA staff, tasked with this responsibility.)

The project staff admit that information gathering is incomplete and cite time constraints as the principal cause. Based on a sample review of field records, the MIS data base, and on discussions with ACDI/Cairo and regional office field staff, it is estimated that achievement of a "formal assessment" is less than 50% complete.

In order to monitor and evaluate the success of U.S. Volunteer visits, it is imperative that additional efforts (and probably project resources) be focussed on this activity. An accurate assessment of which technologies ultimately are "picked up" by Egyptian farmers (and the rate of adoption) will not only provide an invaluable insight into the state of the Egyptian agricultural sector, but will also allow the FTF program to more effectively discriminate and plan for future FTF activities.

- * *An analysis made of increased Egyptian farm yields and incomes resulting from the use of the new and improved farm practices introduced during Phases I and II."*

9. An analysis of increased Egyptian farm yields and incomes resulting from the use of the new and improved farm practices introduced during Phases I and II of the FTF program has not been made. There are the beginnings of isolated "case studies" on a few individual farms, but these are neither sufficiently documented nor has standard econometric analysis been applied to yield any significant conclusions about the impact of the project. The resources required to effectively achieve this specific output, even a cursory analysis, are beyond those available to the project. Diverting resources from the principal objectives of the project to achieve this output would be damaging and counter productive to the program.

An econometric analysis of the impact of the project, particularly the outreach component, would yield valuable information on farm production functions and how extension activities impact the agricultural sector, but this information would be of limited use in

programming the remaining resources of this project.

The primary user of this information would be the MOA/ARC/Technology Transfer component of the NARP, and development agencies which are contributing to the agricultural sector and make periodic reviews of alternative investment opportunities. The project has the beginnings of an excellent data base from which to build an analysis, and this data base should be made available (on a confidential basis) to serious researchers.

There are a few specific measurable questions for which answers would be of value to the FTF program, especially for designing any expansion of the program. Of key concern is the question of mechanism and mechanics of outreach activities conducted by the "core group" farmers. Gathering more information on what factors influence the ability of the core farmer to reach out to his neighbors will be particularly valuable in designing a more effective intervention strategy.

A relatively simple and focussed study could be conducted as a separate exercise by the project. Funding for this study could be made available from the "Sub-Project" component.

"Task Two. Determine whether achievement of outputs are resulting in realization of program purposes. To what extent have the following purposes/specific objectives of the FTF been addressed and realized during the period of the evaluation:

These are evaluated individually below.

* *1. Provide low-cost, short term technical assistance to achieve tangible and viable improvement in Egyptian farm operations;*

1. The U.S. Volunteer assistance provided through ACDI and VOCA is easily documented to be less costly per consultant month (by approximately 50%) than a similar for-profit consulting firm. A cost comparison in the following Table (2) is presented.

It is probably an inherent perception from human nature that something you pay for is more valuable (and better) than something which is given to you free. A volunteer based program always raises doubts as to the quality of help or assistance. "Would we have gotten better technical assistance if we paid for it and could choose the consultant, rather than rely on volunteer expertise?", is a question which any volunteer based program has to continually answer.

The quality aspect of the FTF technical assistance program has been exemplary, and certainly nullifies any challenge to the cost effectiveness of the technical assistance component. VOCA, which is responsible for recruiting U.S. Volunteers, has perhaps the largest

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<u>Table 2. Consultant Cost Comparison</u>	<u>Cost Consultant Firm</u>	<u>Cost ACDI/VOCA</u>
Fee, 23 days @ \$300/day	6,900	0
Consultant overhead @ 100% of salary	6,900	N/A
Airfare	2,200	2,200
PerDiem: Consultant @ 98/day	2,940	1,500
Local Transport	500	500
Misc. Travel	500	500
VOCA Management Fee & Costs	N/A	2,250
ACDI overhead @ 39%	N/A	975
<u>G&A @ 10% of all direct cost</u>	<u>1,304</u>	<u>N/A</u>
Total/Month	\$21,244	\$7,925

Note: This cost is the marginal cost of providing one additional consultant to the project. There appear to be limited stepped economies of scale to this program. As the number of consultants increases, the per unit cost decreases.

data base, or access to data bases, of any single organization involved with providing international agricultural technical assistance. If a particular skill or technical expertise has been requested through the FTF program, VOCA is well suited to find a person to respond. The kind of technical assistance VOCA is able to recruit for volunteer assignments ranges from world class experts (i.e. Dr. Robert Kunkel, one of the world's leading experts on the potato) to very practical working farmers. VOCA has an active list of over 2,000 volunteers whom have indicated they are ready for an overseas assignment, as well as linkages to over 100 personnel data bases and recruitment networks, grouped below by major category:

- 41 Agricultural Cooperatives and other Agribusinesses
- 35 Professional Agricultural and Financial Credit Associations
- 22 Universities
- 15 State Cooperative Councils
- 13 State Extension Services
- 9 Credit Unions & Banking Institutions
- 7 Federal and State Government Agencies
- 6 Other Private Organizations

The ACDI FTF program in Egypt has fielded a mix of technical experts and working farmers, in response to demands from the "core group" of farmers.

The selection of U.S. Volunteers is a farmer problem demand-driven process. ACDI field staff begin the process by working with "core group" farmers and extension agents to identify and understand their most critical problems, which the FTF program would be suited to address through the U.S. Volunteer technical assistance. The MOA extension agents are

actively involved at this level. A request for assistance is generated at the field level and is farmer specific. These are forwarded to the Cairo office and when a critical number (varies from commodity to commodity) is received, a Volunteer Request Form is submitted to VOCA in the United States. VOCA then recruits several potential volunteers and forwards the resumes to Cairo for final selection and approval for travel. This entire process and associated forms is documented in detail and readily available at ACDI's Cairo office, and so will not be presented in this evaluation.

- * *"2. Help transfer sustainable technologies (i.e. new techniques, products and practices) from the U.S. to Egyptian farms through intensive hands-on training of farmers and extension agents in Egypt;"*

2. The survey conducted by the evaluation showed that technologies are being transferred to the farmers in the core group. Both the total number of new technologies and the rate of adoption (transfer) are impressive. The new technologies (or recommendations as termed by the FTF program) are mostly focussed on more efficient management of agricultural inputs or on-farm operation systems. Few of the technologies in the list of 177 specific farm improvements which have already been adopted though this program require major changes in either the current agricultural systems, or additional inputs not currently available in Egypt. All of the technologies appear to be immediately transferrable to a large number of farmers, (as evidenced by the 2,858 documented instances where they have been applied).

The strategy of using U.S. Volunteer farmers and experts working on a one-to-one basis with the Egyptian farmer has proven to be a successful mechanism for the rapid exchange of technology information. The subtle nature of many of the new technologies (i.e., forming the furrows in irrigated fields differently, or analyzing a dairy herd's movements to redesign a feedlot) are not conducive to mass marketing approaches to technology transfer. In addition, the one-to-one approach utilizing other farmers as the introducer to the new technology, lends an air of credibility to the information being offered.

- * *"3. Teach selected Egyptian farmers and extension agents new farm management techniques through further intensive, on-farm management training in the U.S. in specific crop and/or livestock areas;"*

3. The evaluation conducted in-depth interviews with fifteen returned participants and reviewed the participant training program from participant trip reports and other documents provided by ACDI.

This component is not going as far as ACDI would like it to go in establishing a permanent link between Egyptian farmers and their U.S. counterparts. Language barriers and arranging for international travel are still major obstacles which need to be overcome before the Egyptian farmer, even the relatively advance farmer, will endeavor to make an independent trip to the United States. The evaluation did find that a number of the returned partici-

pants indicated the value of the initial United States training experience was sufficiently high that they would be willing to fund the cost of international travel, if other logistic arrangements could be provided for, especially translator services.

The experience of visiting working farms in the United States is providing the opportunity for additional technology transfer to take place. The U.S. Volunteer when visiting an Egyptian farm provides recommendations within the context of the Egyptian agricultural system (henceforth one of the reasons so many of the recommendations do not require additional inputs not presently found in Egypt). The Egyptian participant visiting the United States farm assesses totally new technologies and different operational systems for adoption to the Egyptian agricultural production environment. There is evidence from the returning participants that technologies, which are in addition to those being provided by the U.S. Volunteers, are being "imported" from the United States through the participant training program. It should be noted that none of these are being tracked by the project, so there is little quantifiable information on the total number of technologies or the rate of "importation".

There are two additional resulting impacts from the participant training program which go a substantial way toward achieving the project goal. The participants who go to the United States are provided a "vision" of what a modern, efficient, and competitive agricultural production system is suppose to look like. This is a difficult concept to convey through media, without a first hand experience. It is this "look" at the amalgamation of sophisticated technologies working together to produce a private sector driven food production system which motivates and convinces Egyptian farmers to emulate these systems.

Secondly, being chosen amongst the "core group" of farmers to participate in a training opportunity in the United States elevates the status of that particular farmer in their own community, contributing to the creation of a "leader".

And, finally, the impact of cultural exchange, exposure to new ways of life and ideas, and increased understanding of the American people is a basic benefit which cannot be quantified, but is very evident from the interviews with the returning participants.

* 4. *Apply the newly learned farming techniques at home and share them with neighbors and colleagues upon their return to Egypt;*

4. The FTF program has been weak in providing follow-up with participants to take full advantage of their experience to share with others in the community. The participants are all required to sign a "contract" which binds them to conduct seminars or village meetings upon their return to initiate the outreach process. The commitments to conduct meetings and seminars have, for the most part (according to ACDI regional office records), been fulfilled, but then there is little, if no, incentive for the returned participant to continue outreach activities, if he is not inclined, or if there are other limiting constraints. This an area the project needs to focus on.

- * *5. Strengthen horizontal and vertical linkages between the National Agricultural Research Center, its extension department, governorate-level departments of the Ministry of Agriculture, Egyptian agricultural cooperatives, and private farm operations;*

5. The program has been mildly successful at strengthening linkages between the various institutions all focussed on the same problem; i.e., increasing agricultural productivity in Egypt. The largest success has occurred at the local level, where the FTF program has helped to consolidate and focus resources of the local MOA extension service. The linkage with University resources is virtually nonexistent, although several initiatives have been made by the FTF program to utilize University research expertise and facilities. The project has all but been ignored by the NARP and the ARCs. A strong recommendation of the evaluation centers on strengthening formal communication linkages between the project and the MOA/ARC/Technology Transfer component of the NARP. There has been good cooperation between the project and regional agricultural cooperatives, especially in the dairy sector.

The greatest service the project can provide in strengthening linkages between agricultural based institutions in Egypt, is to serve as an "introducer" and conduit for information and communication between the various institutions and the farmer. A good case in point is the potential linkage between University based expertise and resources, and the farmer. The Mansoura University, Faculty of Agriculture has an excellent plant pathology department. Potato and tomato diseases identification has been shown to be one of the major constraints to increasing productivity in these crops (farmers do not know what to treat on a timely basis). After discussions with the Faculty of Agriculture Department Deputy Chairman, it was obvious that a willingness to cooperate with the FTF program to work on this problem was forthcoming. The role FTF should play in this process is to introduce the farmer to the University facilities and help the farmer to establish the first-time contact at the University. The farmer will not initiate a visit to these resources alone. The FTF program has a comparative advantage over other institutions in fulfilling this role, in that the FTF program is independent of the MOA and therefore is unencumbered with a territorial bureaucracy.

- * *"6. 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 specialist and FTF project staff to transfer new technology on a much larger scale in Egypt in the future;"*

6. The project has been very successful at building a solid base of enthusiastic and knowledgeable "core group" farmers. As the project is currently designed, there is little attention paid to what happens to this valuable resource (the "core group" farmer) in the near-term future, or how the project proposes to "Egyptianize" the FTF program in the long-term. The evaluation survey found that virtually all the farmers participating in the program at the "core group" level are receiving positive benefits. There is a high degree of support

and goodwill which has been generated from within the "core group" of farmers for the FTF program. All the elements are there for establishing an extensive outreach program, but these have, so far, not been put together.

* *7. Develop sustainable professional relationships leading to the continued exchange of agricultural technology and improved farm management practices after the project is completed;*

7. Language barriers continue to be a major constraint toward achieving this objective of the project. There is substantial documented post-departure correspondence between U.S. Volunteers and FTF project staff, but this is all directed toward the ACDI regional office coordinators (or through the coordinators to individual farmers). The evaluation survey found little evidence of self-sustaining technology transfer activities or active technology information searches modeled after the FTF approach being undertaken by farmers which were being conducted outside project assistance channels.

It appears that the only way for this program to become "self supporting" in the private sector is to focus almost exclusively on those farms which could pay for the new technologies, i.e. the large corporate farms being developed in the new lands. However, this would ignore all the "public good" aspects of technology transfer programs that are difficult to capture with a strictly private sector operation.

* *"8. Establish a monitoring system to track the improved practices adoption rate by farmers as well as increased yields from adoption of these improved practices."*

8. The MIS which was supposed to have been in place at the beginning of Phase II of the FTF program, necessary to accomplish this objective, was scrapped early in the project, after being determined to be inadequate to accomplish the task of impact and yield assessment. A new system was specified and a contract was let to a local Egyptian firm to program and build the MIS. This new system only became operational in November of 1991. This has set back the achievement of this objective. (See Task (5) for a more detailed response to this question.)

Task 3. Was the implementation plan adhered to.

The implementation plan, as measured by achievement of benchmarks has been followed. The achievement of progress toward project benchmarks has been slower than expected, especially for two major inputs (number of U.S. Volunteers and number of participants), largely due to the Gulf War and to a slower than expected start-up for some activities.

The Grant Agreement, Attachment # 2, "2. Implementation Plan. Sections 2.1 Technical Approach", is reviewed section by section.

ACDI has followed the plan detailed on page 6 of the Grant Agreement Attachment.

ACDI has adhered to the plan described in Section 2.2 "Project Participants and Responsibilities".

Sections 2.3 "Personnel Requirements" and Section 2.4 "Activities To Be Implemented" have been followed, although, as noted earlier, video production is behind schedule, and probably will not achieve the target. The MIS plan has been followed according to the implementation plan, which only infers that the MIS will be used to measure economic impact of the FTF program. The "Mini-Project" component under this section has been implemented by ACDI, but with little guidance. Please refer to later sections of this report.

ACDI has adhered to the plan in Sections 2.6 "Project Sites", and has added one additional governorate, for a total of 13.

Section 2.7 "Project Beneficiaries" states that ACDI will target a broad spectrum of farms from large, sophisticated operations, to small farms of only 5-10 Feddan size, and primary emphasis will be on fruit, vegetable and livestock commodities. The project has adhered to this plan. There has been perception that only larger operations have been targeted by the program. The following frequency distribution graphs showing the distribution of farm size over the total number of farms by commodity group under the Mansoura target area indicate otherwise. See the following Figures (6-14).

The procurement plan detailed in Section 2.8 "Procurement Plan and Waiver Requirements" has been followed. A major commodities have been procured and are being used by the project.

Task 4. Has the implementation strategy and technical approach of the program proven successful in meeting the specific objectives. Has ACDI adhered to the technical approach stated in the Grant Agreement, namely:

- * 1. *Optimize the use and impact of the U.S. volunteers' time in Egypt by focusing farm visits on 600 medium-to-large "core group" farms and reaching the Egyptian small farmer through village meetings, farm demonstrations, and evening video presentations organized by FTF local project staff and ARC extension agents;*
- * 2. *Quantify the socioeconomic impact of the program by tracking progress on individual farms via the FTF management information system (MIS); and*

Figure 6. Mansoura Office Core Group Farm Size Distribution - Apple/Pear

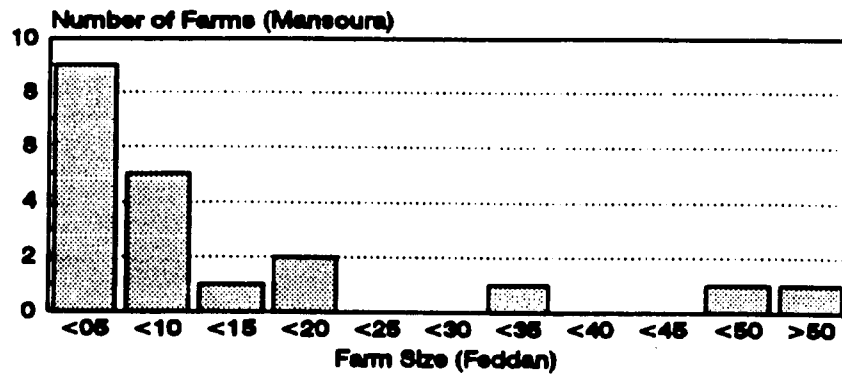


Figure 7. Mansoura Office Core Group Farm Size Distribution - Banana

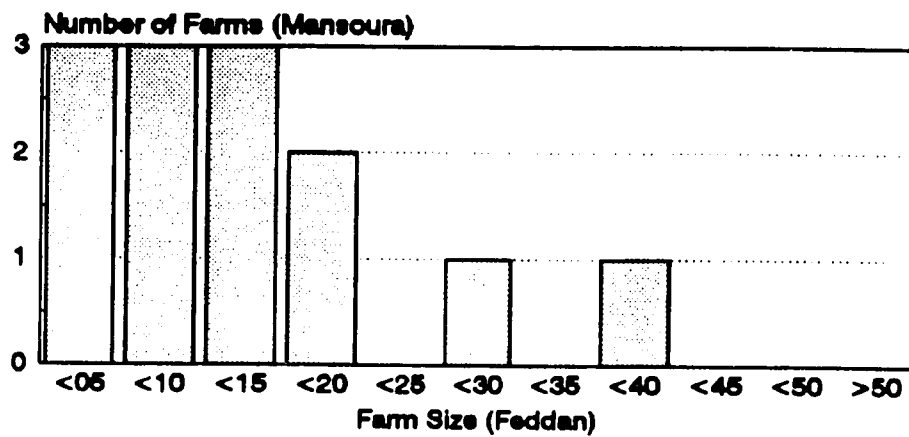


Figure 8. Mansoura Office Core Group Farm Size Distribution - Citrus

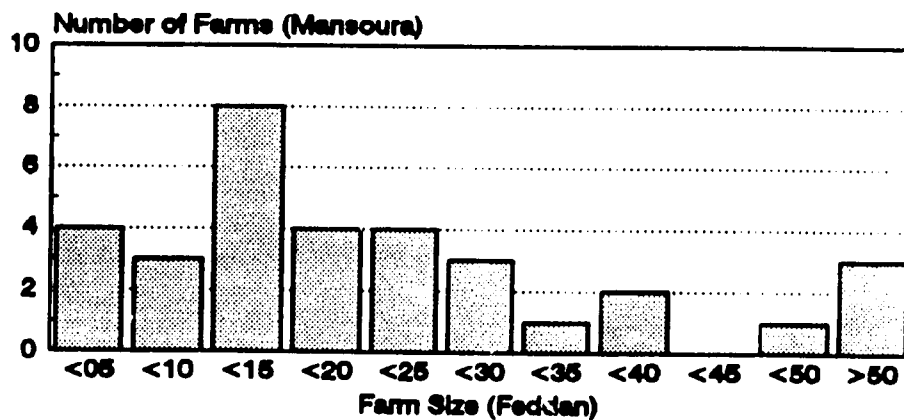


Figure 9. Mansoura Office Core Group Farm Size Distribution - Beekeeping

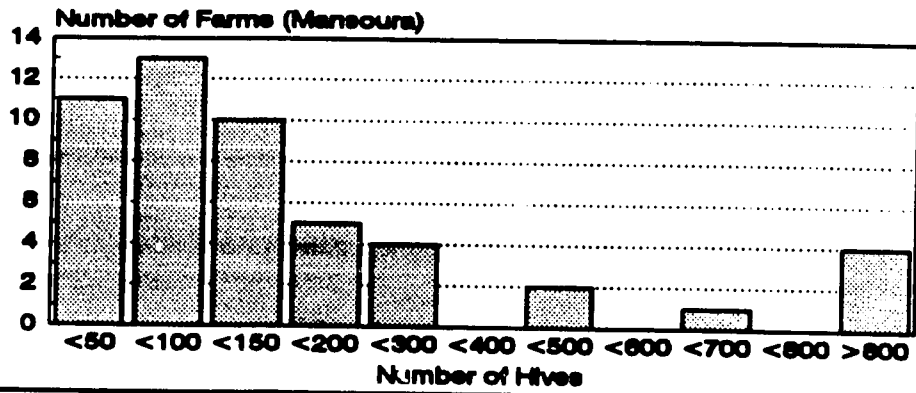


Figure 10. Mansoura Office Core Group Farm Size Distribution - Dairy

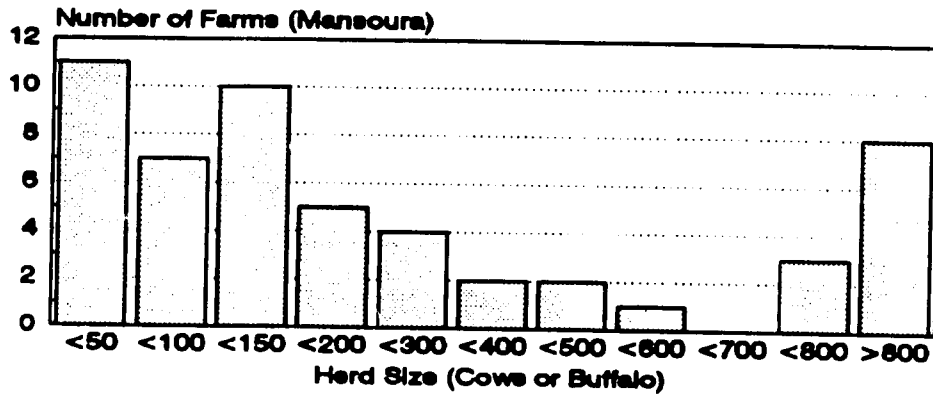


Figure 11. Mansoura Office Core Group Farm Size Distribution - Grapes

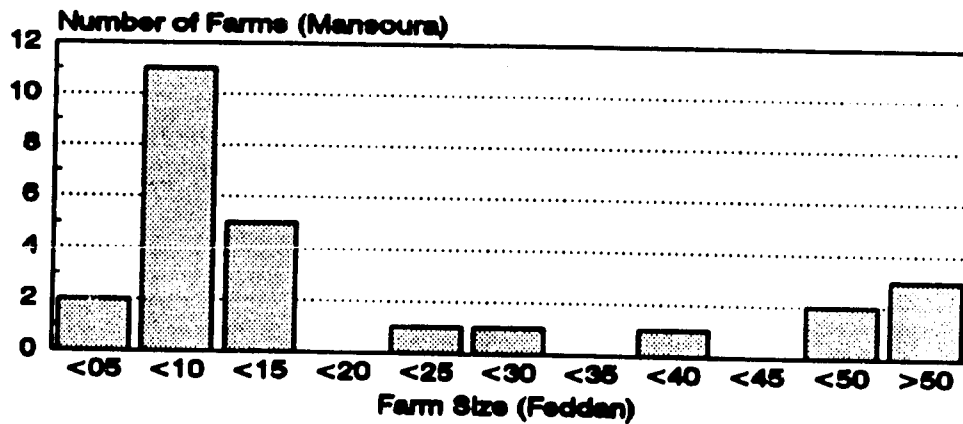


Figure 12. Mansoura Office Core Group Farm Size Distribution - Greenhouse

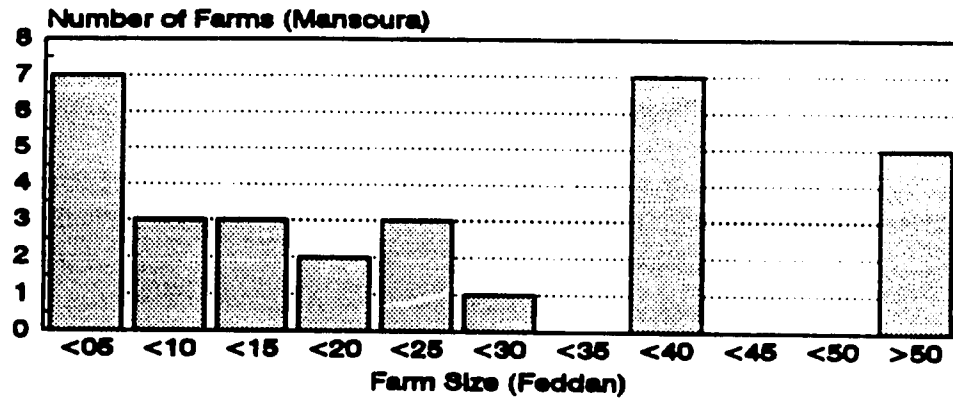


Figure 13. Mansoura Office Core Group Farm Size Distribution - Potato

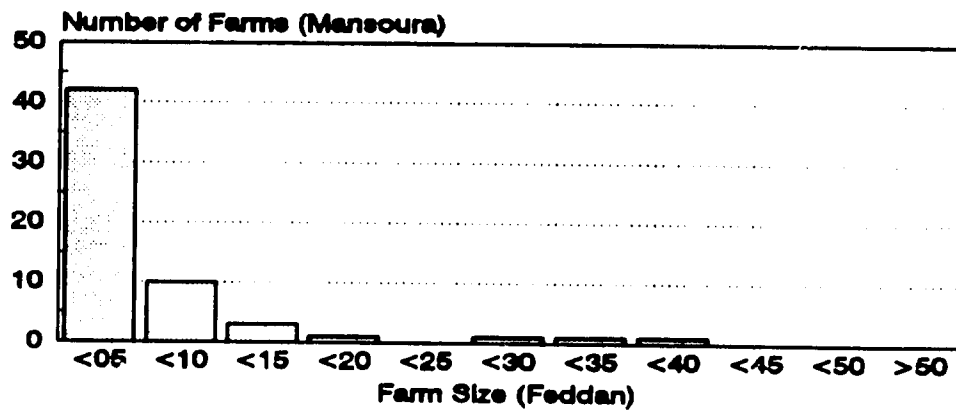
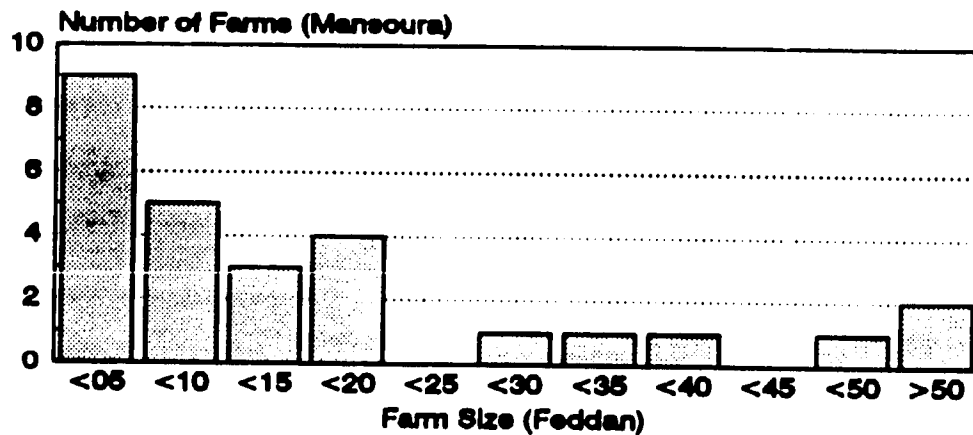


Figure 14. Mansoura Office Core Group Farm Size Distribution - Tomato



- * *3. Institutionalize the program by mobilizing Egyptian farmers, research personnel, and extension agents as active participant in the FTF technology transfer program.*

This task is really two separate questions. The first asks about how well the strategy is linked to outputs and associated objectives.

The overall strategy, as presented in the Implementation Plan, is linked closely enough to achieve the specific objectives (Grant Agreement Attachment # 2, I.1.2 Project Purposes/ Specific Objectives), with the exception of the technical approach dealing with "socioeconomic impact". The Grant Agreement Specific Objectives requires the project "to establish a monitoring system to track the improved practices adoption rate by farmers as well as increased yields from adoption of these improved practices." At some later point later in the Grant Agreement, there is a leap of faith that this specific objective (and related project outputs numbers (8) and (9), page 3 of Attachment # 2) will result in a quantification of the socioeconomic impact of the program on individual farms. This is not possible without substantial additional resources and specific econometric research activities which are not included in the implementation plan.

The strategy, as outlined in the Grant Agreement, is focussed mostly on achieving objectives which will result in the education and betterment of the 600 core farmers. The evaluation feels this is only the first half of the process (and the most expensive half) toward reaching the higher goal of the project. If the project were to stop here, it is a very expensive project indeed. The total cost of the project (USAID, ACDI, and GOE contributions) is 7,416,500 U.S. Dollars. As the strategy is currently implemented, the principle beneficiary of this effort are the 600 farmers in the core group. The project will have spent an average of 12,361 U.S. Dollars per farmer.

A simplistic investment calculation can be made to determine the order of magnitude of impact necessary to equate this project with alternative public investment opportunities. In simple terms, the net increase in income ⁽²⁾ per farm per year (600 farms) required to yield a NPV over 5 years (estimated useful life of the specific technologies being transferred) using a 5% discount rate, which is equal to the investment in the project, is 9,451 LE. Surprisingly, there are indications that the project may have had this much impact on the core farmers alone. If an assumption is made that each "core group" farmer in turn transfers adopted technologies to at least 10 other farmers, (the same assumption used in the Technical Proposal) this amount is reduced to only 945 LE; not only achievable, but it would make this project a very cost effective public investment opportunity indeed. This simple analysis ignores any other benefits which would undoubtedly accrue from multiplier effects, and intangible benefits such as the benefit of cultural exchanges.

(2): Income, as used in this example is meant to be that amount of net benefit which accrues at the primary producer level, resulting from changes in farm operations due to the intervention of the FTF program, adjusted for all other economic variables in the farm production function.

The second part of Task (4) takes a specific look at use of U.S. Volunteers' time. The U.S. Volunteers' time has been used very well within the context of the implementation plan. A major recommendation of the evaluation revolves around establishing closer linkages to the ARCs. Several U.S. Volunteers would have been valuable resources if this linkage were to have been established from the start of the project. The U.S. Volunteers spend over 80% of their time in the field, visiting farmers, identifying and adapting technologies to the local conditions, and participating in organized fora for information exchange (seminars, village meetings, etc.).

A third specific question in this Task relates to whether ACIDI has set up a MIS sufficient to measure quantitatively socioeconomic impact resulting from project activities. Looking at whether a MIS is in place that could theoretically measure socioeconomic impact is easy; whether it is practical or possible to reliably measure socioeconomic impact of a single project like the FTF, is the source of a continuing intense (and unresolved) debate in virtually all university agricultural economics departments. The system of managing available information being collected by the project is in place. It is not the best system in the world, but workable. The system for gathering information, especially basic yield information about farm production, has not been adequately thought out by the project. The project is not gathering sufficiently objective or verifiable information from individual farmers on parameters which would normally be used in a socioeconomic impact assessment.

The institutionalization (or "Egyptianization" as the FTF Technical Proposal terms the process) has not occurred to the degree expected either in the Technical Proposal or Grant Agreement. The goal of institutional development of the technology transfer, as stated in the technical proposal, is to have Egyptian farmers be able to search out and adopt new technologies on their own, without the assistance of the FTF program. The evaluation does not see this happening within the lifetime of the project. While farmers involved with the program are being exposed to new ways and more efficient methods of producing food, and are adopting many of the new specific technologies which make their own farms more productive, the process of searching out these technologies is a difficult one to teach, and involves more transaction costs than most individual farmers can afford.

The program has been successful at strengthening local institutions involved with agricultural development. The FTF program, as noted earlier, is serving as a catalyst to generate new enthusiasm in the extension and outreach services already in place through the MOA. Improved communication links between the MOA/ARC/Technology Transfer component of the NARP, closer working relationships with regional University resources, and continued involvement with the local extension service will advance the "Egyptianization" of the program in the remaining year of this grant period; but, the FTF concept of technology transfer using direct U.S. technical expertise to work with individual Egyptian farmers will fall apart if continued public assistance is not forthcoming at the end of the project. Due to the "public good" nature of much of the technology being applied to Egyptian farms through the FTF program, it is doubtful if the program could stand alone without some public assistance.

The project needs to refine the strategy of utilizing more indigenous resources and begin to substitute for foreign based technology transfer. There are several large private sector agricultural operations which are importing new technologies strictly on a private basis, without any government assistance. Dina Farm, in the new lands, is a good example. This farm is a prime source of indigenous technology, all of which, has recently been "imported" from the United States, Europe, or Israel. The FTF program has made a few initiatives to use the resources of the Dina Farm, but could make more use of this, and other similar, technology resource centers.

Task 5. Has a workable, practical MIS been developed and is it useful for measuring long-term impact.

A MIS has been developed, but its utility in measuring "long-term impact" is questionable.

The MIS, as a specific objective, was designed to provide a monitoring system "to track the improved practices adoption rate by farmers as well as increased yields from adoption of these improved practices". This is reiterated again in the implementation plan. At some point during implementation, the establishment and purpose of the MIS went far beyond the simple objective of monitoring inputs and tracking yields, and evolved into a much more complicated econometric computer model of the Egyptian farming system, trying to determine the impact of the project on the farmer's income and general well-being. These are two very different objectives and require different sets of resources to accomplish them. Keeping track of project inputs and providing for efficient management of resources, is an administrative task. The project has excelled at this. Obtaining socioeconomic data and quantifiable crop yield information from hundreds (1,000 farm profiles was the original number mentioned in the Technical Proposal), and trying to correlate this to specific changes in the farm production function, is an econometric and agronomic research task. The skills required for accomplishing this are very different from the management skills required for the former task. Not only are analysis and management of the two information systems different, but the process of information gathering is different. To quantify yield or some other proxy for impact as correlated to FTF interventions, requires a well designed controlled experiment using farmers in the program and farmers not in the program. The designers of the project strategy, apparently, neglected to include sufficient resources in the project to accomplish the larger task of impact assessment.

A brief description of the evolution of this component beginning with the initial Phase I FTF Program to its current state is useful in clarifying this point. The FTF program, at face value, is an expensive and innovative technical assistance program. The program is a marked departure from "traditional" agricultural assistance activities which AID usually funds. AID tested the concept in several countries to try to determine if this program was comparable with other alternative assistance options, in terms of resulting in more, or a faster rate of, technologies being transferred to the agricultural sector. Monitoring of project activities and

trying to link these with farmer well-being was an important component of the program. Both AID and ACDI recognized that a meaningful evaluation of the program would not be possible at the end of the initial Egyptian pilot phase. At this point in time, insufficient data was available to make any significant conclusions about the program. ACDI and AID agreed to develop a monitoring system in Phase II "to track the improved practices adoption rate by farmers and increased yields as a result of these practices".

As Phase II began, the existing monitoring system (developed during Phase I) was evaluated, and determined to be of little use in accomplishing the objective of determining "impact". The system was scrapped. A contract was finalized by ACDI on November 27, 1990 to a local Egyptian firm (Environmental Quality International) to design, program, and implement a new turn-key MIS for ACDI. The contract had few specifications for type of system required, software, hardware configuration and minimum performance standards, and no guidance on data base construction. The contractor was not only suppose to program a MIS, but was also suppose to define the problem for ACDI. The contract put the responsibility for developing not only the system, but criteria for evaluating the impact of the project with the contractor. It is unclear from the contract who was responsible for procuring software and hardware to implement the system. The evaluation also could not find documentation that USAID, (which originally requested the impact assessment be conducted in conjunction with MIS database development) ever provided guidance to ACDI on these points, as requested by ACDI.

The local contractor chose to develop a very complex system which was clearly not implemented by the project (given the resources programmed for this activity), and difficult to use. A detailed technical evaluation of the choice of software and programming used in constructing the computer system would probably show that the MIS is not an efficient system given the needs of the project. Appendix (C) provides two ACDI internal documents detailing some of the problems with the MIS.

The end result is a complex, but workable system, for monitoring project inputs and tracking adoption of specific technologies by the "core group" of farmers. The system is not capable of providing data or analysis for which to determine socioeconomic impact of this project.

Task 6. Assess the "Sub-Project" component of the project.

The "Sub-Project" component of the FTF program could have been more integrated with the central focus of the project. A total of five "Sub-Projects" have been funded (a total of 170,000 LE). These are all focused on dairy herd health and management. A single consultant has been responsible for generating most of the proposals and implementing the "Sub-Projects".

A clear criteria and "decision rule" for funding these kinds of activities needs to be developed. The flexibility the "Sub-Project" component offers is valuable, but has not been used optimally by the project to date.

Task 7. Is there an internal monitoring system in the project.

The MIS has provided the basis for an internal monitoring system in the project. The computerized monitoring system was only operational from the beginning of 1992. Before that time, the project used a manual filing and tracking system of inputs and outputs to monitor the project. The project, if anything, suffers from too much information. This project is extremely well documented. The problem facing ACIDI is how to make use of the plethora of information available to them. The internal monitoring system utilizes the computerized MIS. As development of the MIS evolves, internal monitoring functions will improve.

Task 8. Is the project providing low-cost, appropriate technical assistance in crops with low productivity levels.

The choice of crops was somewhat predetermined by the Grant Agreement (Attachment # 2, 2.2.7 "Project Beneficiaries"; "Primary emphasis will be on fruit, vegetables, and livestock farmers.") It has been shown that the technical assistance being provided is both low cost and appropriate for the types of farming systems being targeted by the project. Table (2) is a summary and ranking by economic value (based on farm gate price) of Egypt's principal agricultural commodities. The FTF program has focused the majority of resources (over 75%) on livestock, potato, tomato, and horticultural crops. These commodities are certainly included in the 10 most valuable crops in Egypt.

In discussions with USAID/ARD economists, agricultural project officers responsible for NARP, and with MOA agronomists, these crops are also prime candidates for improved yields, based on experiment station trials and world production rates. In addition, these commodities tend to be using more complex production systems which American farmers and the FTF program have a comparative advantage in providing "quick fix" technologies.

The program is not working in the three principal cereal crops, wheat, corn, and rice. Most of the improvement potential for these cereal crops lies in utilization of new varieties. The production of these new varieties is being done through the ARC's and CGIAR's, and have little to do with "fine tuning" production operating systems. This is one area where complementarity between the FTF program and the MOA ARC/Extension is very evident. The MOA ARC/Extension makes new inputs available (i.e. new genetically improved crop varieties) and the FTF program helps to make more efficient management of those inputs a reality at the farm operation and production level.

Table 3. Comparative Farm Gate Value of Egyptian Agricultural Commodities

(Data From USAID/Cairo Agricultural Statistics - 1990*, and MOA Statistics)							
ACDI FTFT	Target Commodities	(Various Units*)			Farm Gate	Total Value	Total LE Value
Rank	Commodity	Area Harvested	Yield	Total Production	Price LE	LE	Commodity
1.	Dairy	4,000,000	7	28,000,000	0.60	6,132,000,000	4,599,000,000
	Wheat Grain	1,955,000	14.6	28,453,000	71	2,020,163,000	
2.	Wheat Straw	1,955,000	11.6	22,697,550	23	512,056,726	2,532,219,726
	Corn Grain	1,975,000	17.4	34,276,000	60	2,047,991,000	
3.	Corn Stalks	1,975,000	8.7	17,162,750	8	139,361,530	2,187,352,530
4.	Tomato	370,000	11.4	4,234,000	340	1,439,560,000	1,439,560,000
	Cotton Kentar	993,000	5.2	5,169,000	263	1,356,862,500	
5.	Cotton Stalk	993,000	7.2	7,099,950	8	55,166,612	1,412,029,112
	Rice Grain	1,037,000	3.1	3,187,421	367	1,162,443,507	
6.	Rice Straw	1,037,000	6.6	7,051,800	6	43,155,792	1,205,599,295
7.	Citrus	265,000	11	2,915,000	400	1,166,000,000	674,500,000
8.	Tropical Fruits (Banana)	42,000	19	798,000	1,200	957,600,000	718,200,000
9.	Sugarcane	263,000	42.0	11,000,000	56	638,000,000	638,000,000
10.	Cantalope/Melon	70,000	18	1,260,000	600	756,000,000	567,000,000
11.	Potato	190,000	8.6	1,638,000	290	475,020,000	475,020,000
12.	Beef/ Buffalo	1,500,000	100	150,000,000	3	450,000,000	337,500,000
	Berseen Fodder	1,660,666		1,660,666	240	398,559,840	
	Berseen (Seed)	150,000	1.8	270,000	184	49,680,000	
13.	Berseen (Straw)	150,000	4.1	619,500	11	6,814,500	317,494,500
14.	Grapes	110,250	6	661,500	600	396,900,000	297,675,000
	Broadbean (Bean)	300,000	8.0	2,400,000	107	256,800,000	
15.	Broadbean (Straw)	300,000	6.5	1,950,000	13	25,350,000	282,150,000
16.	Sorghum	319,000	14.0	4,500,000	56	261,000,000	261,000,000
17.	Apples/Pears	35,000	7	245,000	900	220,500,000	165,375,000
18.	Onion	140,000	8.5	910,000	175	159,250,000	159,250,000
19.	Soybean	98,000	1.1	106,700	800	85,360,000	85,360,000
20.	Beekeeping	1,250,000	10	12,500,000	6	100,000,000	75,000,000
	Barley Grain	127,000	8.5	1,000,000	39	39,000,000	
21.	Barley Straw	127,000	8.7	1,104,900	18	19,888,200	58,888,200
22.	Nursery	6,000		0	10,000	60,000,000	45,000,000
23.	Sesame	42,000	4.2	177,000	216	38,232,000	38,232,000
24.	Superbeet	34,000	16.9	575,000	55	31,625,000	31,625,000
25.	Groundnuts	29,000	11.9	350,000	81	28,455,000	28,455,000
26.	Garlic	14,800	9.5	185,000	130	24,050,000	24,050,000
27.	Lentils	14,000	5.3	85,000	216	18,530,000	18,530,000
	Chickpea (Beans)	13,000	5.2	70,000	190	13,300,000	
28.	Chickpea (Straw)	13,000	5.1	66,300	9	596,700	13,896,700
29.	Fenugreek	14,000	5.8	82,000	144	11,808,000	11,808,000
30.	Flax	30,000	4.4	132,000	82	10,824,000	10,824,000
31.	Lupine	7,800	5.4	40,700	197	8,017,900	8,017,900

(All figures are in 1990 LE. *Farm gate price corresponds to the units in "Yield")

Task 9. What are the strong and weak points in the project.

Strong Points:

- The project is filling a niche in providing appropriate technologies and outreach services which is not being addressed by other institutions in Egypt.
- ACDI management has been applied effectively in seeing that project inputs are appropriately directed and used efficiently. There is a high degree of professional integrity associated with implementation of the project. This, combined with the enthusiasm and dedication of the field staff have resulted in a well run project. The importance of this factor in the success of technology transfer should not be underestimated. All the valuable information being imparted from U.S. Volunteers to Egyptian farmers about technology and farm management, goes through a narrow conduit of translators, interpreters, and field assistants.
- The U.S. Volunteers themselves have shown a high degree of commitment to this program. It is probably a misnomer to call them "volunteers", since that term generally conjures up a vision of low value work, or the U.S. Peace Corps, with a more cultural exchange focus as compared to a technical assistance project. This program is neither low value or focused on cultural exchange. The quality of technical expertise which has been recruited into the FTF program is world class. It has been common in the experience of the program to date, to find U.S. subject matter experts, who are not familiar with Egypt, to spend considerable time before the start of their assignment preparing materials and researching the cultural and agricultural setting. At face value, this program has the trappings of a "junket". It is anything but. Of the over 60 U.S. Volunteers who have participated in the program under Phase II, at least 58 could be deemed to have had a successful technical exchange, and would be invited back.
- The cultural exchange which is occurring as a result of the project - forming a lasting bond between the peoples of America and Egypt through the direct farmer-to-farmer contact - is an important, and successful, part of the program.

Weak Points:

- The project is providing a solid foundation for an excellent outreach program, but has so far failed to raise it far off the ground.
- The project (Grant Agreement) focuses on achieving outputs, as opposed to developing a sustainable strategy for technology transfer.

Task 10. Is the overall program rationale and strategy a good one (and should it be continued, modified, and if so how).

The FTF program is a good program and should be continued. There needs to be much greater emphasis on the outreach follow-on component of the program. It is unclear that "core group" farmers without prompting (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 newly learned technologies and experience (and associated benefit) to other farmers. The program rationale, as stated in the Technical Proposal assumed that larger, richer, and more progressive farmers were "natural" leaders, and that technologies shown to be successful on their farms would trickle down and be adopted by smaller, poorer, and less progressive farmers. This assumption needs to be tested. The evaluation found evidence that this model for the flow of information about technologies and efficient farming practices may not be the most effective way to reach smaller farmers. There are strong indications that different strategies are required for working in different commodities and in different geographic areas.

The project is complementing the services being provided through the MOA/ARC extension department. At the local, village level, the two programs are synergistically linked. An expansion of the FTF program should move in concert with new ARC initiatives in developing six regional research and extension centers.

The program continues to recruit new farmers into the "core group". An evaluation of the success in the selection process for choosing "leaders" should be conducted. There appear to be distinct criteria which can help to screen potential participants in the program. Among factors which should play a role are:

- geographic area
- size of farm
- demonstrated leader qualities
- commodity type and local market structure
- areas where there is poor extension support
- cohesive farming community

The selection of the individual must be coordinated with similar selection criteria for determining geographic areas to work in.

Different locations and principle commodity focus will dictate different assistance and intervention strategies. For instance, U.S. Volunteer assistance should be used for the larger and more complex farming systems, but local experts recruited from the pool of Egyptian technical expertise may be more effective at reaching the less complex and smaller farms.

The program should maintain the United States participant training program, but make selection of participants even more exclusive. Larger farmers with obvious private sector and commercial transaction capability should be given preference to go to the U.S. Repeat, or second, visits should not be ruled out, but any repeat visit should have some cost sharing from the participant.

Results and Conclusions

The FTF project is resulting in the rapid transfer of new technologies and farm management practices to Egyptian farmers in all socioeconomic classes. 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. Virtually every farmer in the "core group" (over 90%) has adopted at least one new technology introduced by the program in the past 24 months. From introduction to virtual adoption by the entire population exposed to the technology in less than two years is a significant accomplishment.

The strategy of the FTF program takes time to become settled in at the local village level. In analyzing the spread of impact (resulting from the program) geographically, from the few governorates and localized target areas of Phase I, to the more than 13 governorates the program is active in today, it is apparent that impact and success of the program is highly correlated to the amount of time the program has been active in an area. The program has shown that there is an absorptive capacity to technology transfer. Providing more resources faster, will not necessarily result in proportionally greater impact. Regulating the rate of inputs to match the absorptive capacity of the Egyptian farmer program certainly limits the total scope of activities possible within a project time frame.

Program resources are not distributed uniformed over either commodity types or across governorates. There is a definite "clumping" of "core group" farmers in 2-3 commodities and 3-4 governorates. The concentration in only a few commodities and governorates has effected the potential for over all impact. The survey the evaluation conducted also confirmed that there are differences between governorates with respect to project impact. The following figures (Figures 15 & 16) show the distribution of two indicators for project resources across commodity type and governorate. Figure (15) denotes the number of participants attending meetings across the nine governorates covered by the Mansoura regional office, by commodity subject. Figure (16) provides a similar look at the distribution of where the "core group" farmers are concentrated. The project management may want to review the support functions of the two regional offices with respect to the ability to support the target governorates.

Figure 15. Geographic Distribution of Meetings

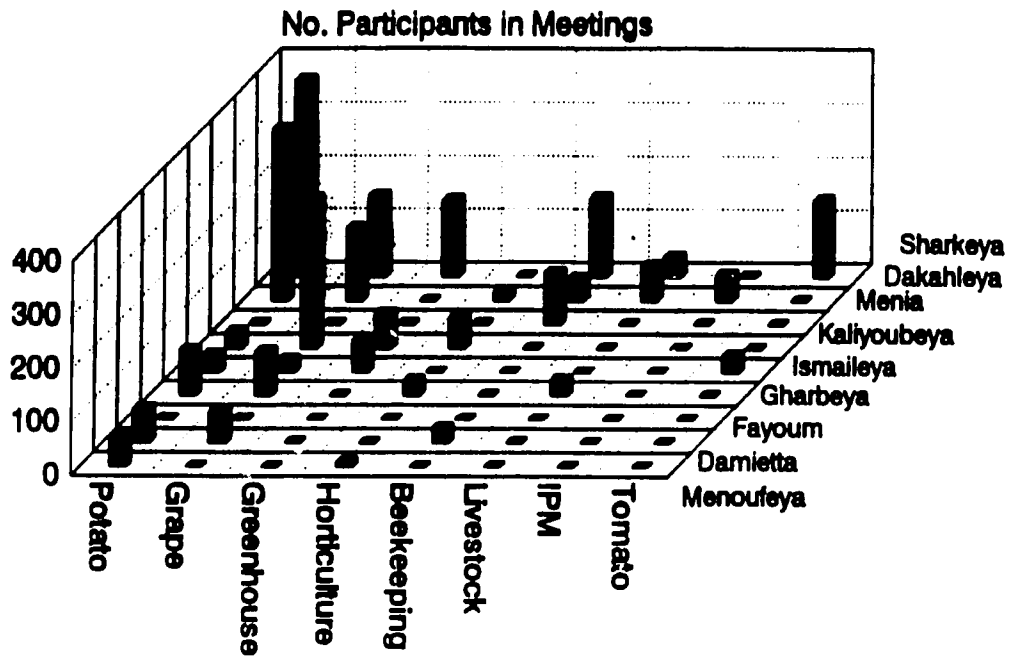
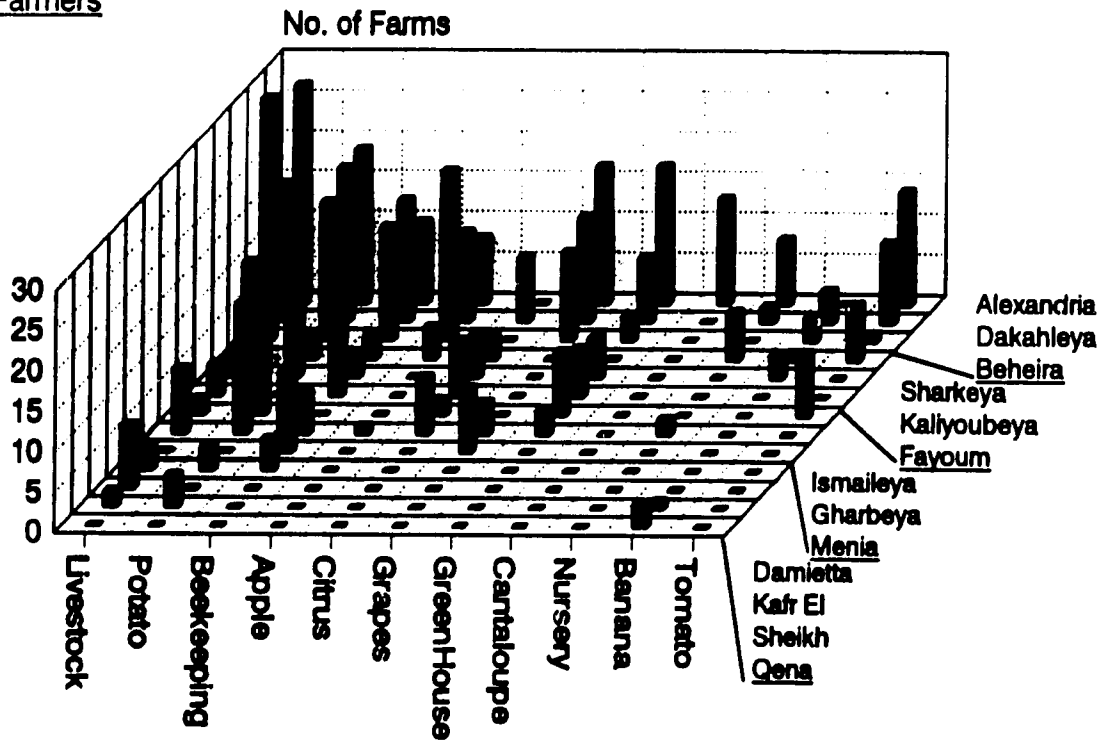
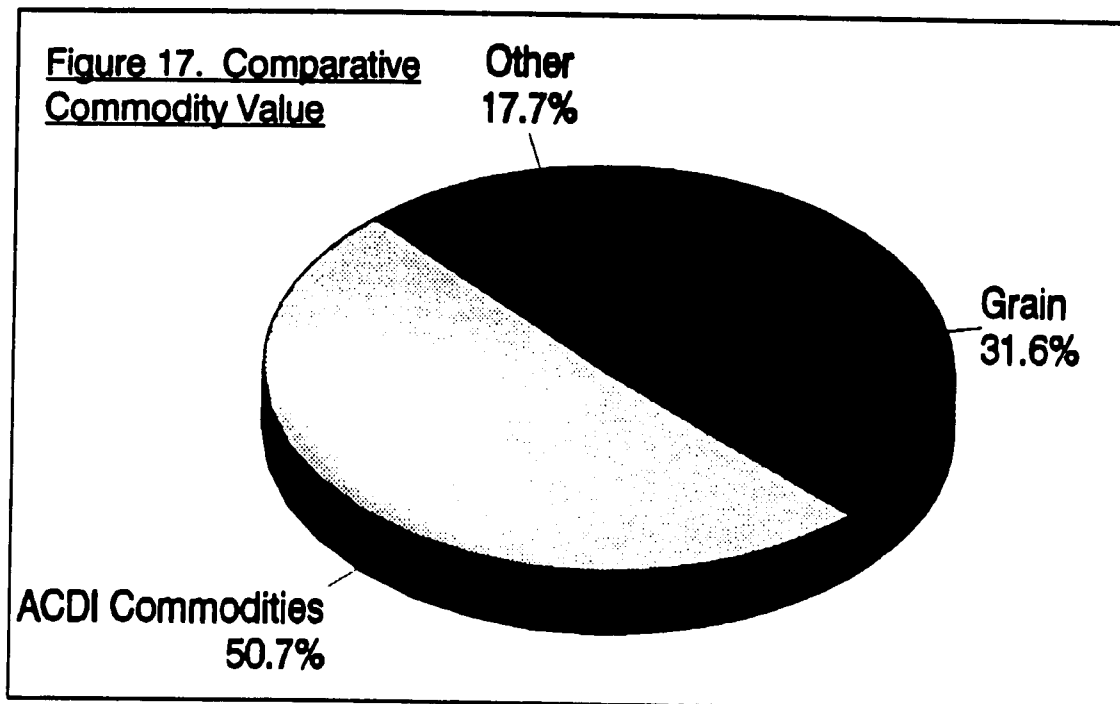


Figure 16. Geographic Distribution of Core Group Farmers



There has been a concentration of resources on a few key commodities, but the total basket of agricultural crops the program is working with, taken a farm gate value, represents over 50 percent of the agricultural sector. If resources could be applied to all the commodities the FTF program is working with at the same level as the 2-3 key commodities have received so far, the potential for impact on the Egyptian agricultural sector is quite substantial. To demonstrate this, Figure (17) compares the relative total farm gate production value of the commodities the FTF program is working with, to cereal and grain commodities, and to all others (31 commodities total).



The management of the grant as a "project" has detracted from the flexibility of ACDI in implementing a more responsive program. The emphasis on "outputs", "achievements", and "impact assessment" prevalent throughout the project's documentation has clouded the vision of the program. As a result, the outreach component, and using "core group" farmers as active outreach agents, has received little attention. This type (and size) of project is probably more aptly suited to a cooperative agreement, rather than a grant.

The management of the program, as dictated by the Grant Agreement, has also focused the institutionalization aspect of the program on developing a sustainable system of technology transfer between the United States and Egypt through a personal network of farmers. This process is not sustainable. The more appropriate focus for sustainability is the continuing use of "leader farmers" as conduits of technology and dissemination nodes to other farmers. This part of the program is sustainable.

It would make sense to expand the project to other governorates. The strategy, as it is being implemented, would seem to have a definite lifespan in any one geographic area. The farmer can absorb only so many new technologies and "fine tuning" of farm operation systems. U.S. Volunteers have found, following in the footsteps of other Volunteers, that they are repeating more of the same recommendations to improve the farming system. While there are diminishing returns to working continuously in the same area, the evaluation by no means is indicating that the "life" of the project in the existing target area is expended. Demands for technical services from farmers in the "core group" continue to pour into the regional FTF offices.

To expand the program beyond the current target area, and in an attempt to "institutionalize" the integration of this program with other research and extension activities, a stepped approach to activities might want to be considered. The first stage may involve a low level of introductory or exploratory activities, with a few Volunteer visits, but focused more on assessing the technical needs and getting an idea of the level of sophistication of the indigenous farming systems in that area. An appropriate strategy for building a group of leader farmers can then be applied.

The second stage would be similar to the existing program; intensive education and technical assistance activities focused on a "core group" of farmers.

The third stage moves away from the intensive activity, but focuses on motivating the, now highly trained, "core group" farmer to conduct outreach services.

A final word on the role of quantifying "impact". This project is not a research oriented project. It is a technology transfer and outreach project. There is a substantial body of scientific literature which adequately demonstrates the positive linkage between technology transfer and outreach activities on farmer's incomes. There are thousands of projects worldwide which use this common knowledge to justify and promote assistance to the agricultural sector. The evaluation feels it is redundant for this project to waste valuable resources to "re-invent the wheel" to try to quantify, yet again, what tens of thousands of agricultural economists have been unable to adequately do. The FTF program should focus MIS activities on those specific informations which will improve the management of the project and result in a refinement of outreach strategies.

While it may not be a productive use of development funds to investigate questions of an ethereal nature best left to the halls of academia, identifying simple proxy indicators which show if project resources are having a positive or negative effect on the targeted beneficiaries is a useful management tool. The evaluation during the course of an intensive, but simple and inexpensive, four day field survey exercise, determined to a 95% level of significance, that the project was having a positive impact on the well-being of farmers.

It is not reasonable to expect every agricultural project to perform costly and detailed econometric analysis. Some projects are simple input-output models. This project appears to be one of those. A very good proxy for impact of the project on farmer well-being is the

number of instances of new technologies which are adopted. No one is forcing the farmer to change his ways of operation. If the farmer does not see an obvious benefit of the technology, he will not adopt it. If there is a benefit in changing his way of farming, the farmer will do it. Period.

The level of impact of this type of intervention reaches up though-out the economy of Egypt. Where an economist draws the line, and at what level, in quantifying the impact of these projects is an academic question.

In conclusion, the evaluation found through its own sampling methods that the project is having a positive impact on agricultural production systems in Egypt, although not nearly as much as it could have. There are three easily defined levels of "impact" which the project has affected. The first level of impact is seen in technology transfer, and the resulting "impact" on the "core group" farmers' income and well-being. Was the project successful at importing and transferring useful technologies to the "core group" Egyptian farmer? The answer is clearly yes.

The second level relates the outreach activities and impact of the spread of technology to other farmers not in the core group. Has the project been successful at this level? The answer is not conclusive. More information needs to be generated to sufficiently answer this question, although there are indications that the project has not been as successful as it could be in this area.

Finally, there is the "impact" on the Egyptian agricultural sector as a whole. The project has "imported" a significant number of new technologies which are definitely changing the way farmers are looking at their production systems. For example, the early development of drip irrigation was a simple change from sprinkler irrigation systems, but has had a tremendous world wide impact. There is no claim that this project has produced a revolutionary change to take Egypt from a food deficit to food surplus country, but the Balakous Dairy Cooperative, who now have 529,200 LE more in their pocket, are smiling.

Survey for Impact

The evaluation carried out a survey of farmers participating in the FTF program to determine, quantitatively, if any impact on farm operations due to the project was evident. The survey was designed to estimate, at the core farmer level:

- o if technologies were being transferred to the farmers participating in the program,
- o if technologies were being transferred, did they have a positive effect on farm operations,
- o if the core farmers were serving in an active outreach role, and
- o is there a willingness to pay for part or all of the services being provided by this program.

Methodology:

Sample

A stratified random sample of 30 farmers taken from the core group of 556 farmers was generated (without replacement). In addition to the primary questions about impact, the survey also sought to determine if there were any differences between governorates or across commodities the program is working with. The three governorates and commodities with the largest number of farmers were chosen to examine the program for possible impact.

These are:

Number of Farmers				
	Alexandria	Dakahleya	Beheira	Total 13 governorates
Livestock	27	17	30	111
Potatos	19	19	17	105
Beekeeping	10	15	14	74
Total 11 crop	133	107	100	340\290

The population from which the commodity sample was generated comprised 52% of the total number of farms in the core group. The population from which the governorate sample was generated comprised 61% of the total number of farms in the core group. For the purposes of this survey, and without other indications, it was assumed that differences between farms in the core group approximated a normal distribution.

Questionnaire:

A questionnaire was developed with 12 key questions which were used to determine the impact of the project. The questions were pre-tested on approximately 15 farmers before the survey during a field visit to the Mansoura Regional office. Modifications and additions to the questionnaire resulted from this pre-test.

Each farmer in the random sample was personally interviewed (the majority on their own farms and the remaining in the FTF office or other central location) by both members of the evaluation team. The interview was conducted in Arabic. Each interview required an average of 60 minutes to obtain quality information relating to the questions and to assure complete understanding of what was being asked. The questions and interviews were constructed to be as neutral as possible. Every effort was made during the interviews to avoid "leading questions" which would result in a biased response.

An English translation of the 12 questions is presented below. At the end of this Appendix, is a copy of the Arabic questionnaire scoring sheet used in the survey.

1. *Where did you hear about the project, from friends, from the FTF FA staff, from the MOA Extension agent, or from leaflets?*

(This question was designed to obtain some indication of the linkage between the FTF program and the Extension service, and to see how successful the "outreach" word-of-mouth information flow of the project is. Scoring on this question was yes or no for each category.)

2. *Are you doing anything different on your farm today than before you joined the FTF program? (And if there was a positive response...) What are you doing that is different? Who recommended these changes?*

(This question was scored yes or no, and if yes, the number of new technologies which were the direct result of the FTF program, ie. recommendations provided by U.S. Volunteers. The questions was designed to determine if there were technologies which were being adopted and how many. It is interesting to note, that not all the new changes to farms in the survey sample resulted strictly from the FTF program. The survey interview discriminated those emanating from the FTF program. In the course of the interview, some

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unsubstantiated information about cost savings and increase in production yields was also forthcoming from the farmers. Where the evaluation believed this information could be reliably substantiated with on-farm records, it was noted and examples are presented in another section of the report as indicative impact of the program.)

3. *Are you the only person in this area working with the FTF program?*

(This questions was scored yes or no, and was designed to test the strategy of selecting farmers who could provide optimal outreach services and benefit to other farmers not directly involved in the program. For example, if all the farmers came from one small local, it would be expected that fewer farmers as a whole would receive the benefit of new technologies though the outreach activities of the core farmers, than if the core group were geographically spread out.)

4. *Did you transfer any recommendations made by the FTF program to other farmers?*

(The scoring on this question was yes or no, and if yes, how many farmers. The questions was designed to test the "outreach" component of the project.)

5. *Would you like to travel to the United States? (And if yes...) Would you like to (or could you) share in the expense of the trip?*

(This question was scored yes or no on both counts. The question was added after the pre-test of the survey, based on strong indications that both new potential participants and especially returning participants, would be willing to share in the expense of a participant training program if it would increase their "chances" of being selected.)

6. *Did you apply any of the recommendations suggested by the FTF U.S. Volunteers which visited your farm?*

(This questions was scored yes or no, and was a check on the validity of question number 2.)

7. *Are you having any benefit from applying the recommendations made by the FTF program?*

(This question was also scored yes or no, and if a substantiated number or specifics were provided by the farmer, a percent or cost benefit was noted. The question was another check on transfer of technologies.)

8. *Did the project visit you, and if so, how often?*

(The question was scored yes or no, and if yes, by number of visits by U.S. Volunteers. It was designed to verify the field reports and schedules of U.S. Volunteers, and to get some information on the distribution of visits across farms.)

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Appendix (A)

9. *Would you like to be visited again, and if so, how often?*

(Scoring for this question was yes or no, and by number of requested visits per month. The answers to this question support any conclusions about the overall utility of U.S. Volunteer visits to farms.)

10. *Did the project provide you with any extension leaflets? Do you feel these were enough or would you like more?*

(The question on leaflets was also added after the pre-test of the survey in response to an indication that there was an unfilled demand for additional outreach/extension materials. The question was scored yes or no.)

11. *How many meetings (village meetings, seminars, or on-farm demonstrations) did you attend which were sponsored or organized by the FTF program?*

(The question was scored by total number of FTF organized events the farmer had attended. The information derived from this question helps to validate the FTF field attendance records for organized events.)

12. *Would you be prepared to pay for any of the services now provided by the FTF program or any other "technical" services (such as soils testing) you might need?*

(The purpose of this question was to serve as a check on question number 5 on willingness to share expenses, and to get a better feel for the demand for private sector agricultural technical support services. The question was scored yes or no.)

The following table is complete scoring for all 30 farmers sampled, presented by governorate and by commodity.

Detailed Results:

The following results are based on the entire population of 556 farmers in the core group. An important assumption in the analysis is that there are no significant differences between governorates or across commodities. This appears to hold true for questions 2, 5, 6, 7, 8, and 9.

From the survey, it can be concluded with a 95% confidence that farmers in the core group are adopting new technologies which were introduced by the FTF program through the visits of U.S. Volunteers, and that these new technologies are resulting in positive benefits to the farmer.

Appendix (A)

Specifically, the survey found that 97% +/- 6.3% of the farmers in the core group have adopted one or more new technologies recommended by U.S. volunteers as a result of on-farm visits, and 93% +/- 8.7% of those found a positive benefit.

The survey results showed that 87% +/- 12% of the farmers in the FTF program have a desire to go to the United States as a participant. Only a very small percentage (approximately 5%) indicated they would be willing to share expense of going to the United States. (This result contradicts the evaluation's impression, obtained during a previous visit, that the vast majority of returned participants would be willing to partially fund a second visit.)

Finally, relating to the population as a whole, 83% +/- 13% found the program of U.S. Volunteer visits to be of sufficient benefit, that they would request additional visits, indicating both the positive nature of the program, and that there is an apparent demand (and perceived need) for still more technologies.

The survey results did find significant differences across commodity types with respect to recruitment into the program. Farmers engaging in beekeeping had virtually no contact with the FTF program prior to recruitment, which was through the extension service.

There are also differences in impact between governorates. Not all governorates have a spatial distribution of core farmers which would contribute toward optimizing impact on outreach. Of the three governorates sampled, two had the majority of core group farmers located close to other core group farmers. This indicates the need for more careful selection of core group farmers with respect to outreach potential.

The perception of outreach by core farmers was also found to be significantly different between governorates. (Beheira governorate was found to have virtually no outreach or technologies transferred to other farmers outside of the core group.) Again, indicating the need for careful selection of core group farmers.

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Appendix (A) ACIDI Evaluation, May 1992

Farmer Sample Results

N=556, n=30 stratified two ways; Governorate & Commodity

GOVERNORATE ANALYSIS

(Yes=1)

Farmer No.	Q1-1	Q1-2	Q1-3	Q1-4	Q2	Q3	Q4	No.	Q5	Q6	Q7	Q8	No.	Q9	No.	Q10	Q10a	Q11	Q12
	Y, N				No.	Y, N	Y, N		Y, N	Y, N	Y, N	Y, N		Y, N		Y, N	Y, N	No.	Y, N
AB 182			1		3		1	4	1	1	1	1	3	1	1	1			
AB 184			1		1		1	7	1		1	1	1	1	1	1			4
AB 185			1				1	4	1		1	1	4	1	1				2
AB 187			1		1		1			1	1	1	3	1	3				1
AL 157		1			2		1	20	1	1	1	1	4	1	2		1		4
AL 162		1			2		1	200	1	1	1	1	5	1	2	1			5
AL 166		1			4		1	25	1	1	1	1	1	1	3	1			6
AP 217		1			3		1	20	1	1	1	1	7	1			1		2
AP 222			1		1	1	1			1	1	1	2				1		1
AP 225		1			2		1	3	1	1	1	1	2	1	1	1	1		2
10 Count	0	5	5	0	9	1	9	8	8	8	10	10	10	9	8	5	3	9	2
Total					19			283					32		14				27
Mean	0	0.5	0.5	0	2.11	0.1	0.9	35.38	0.8	0.8	1	1	3.20	0.9	1.75	0.5	0.3	3.00	0.2
BB 337			1		1	1			1			1	4						4
BB 342			1		3				1	1	1	1	1	1	1	1			1
BB 344			1		2	1				1		1	2	1	1				2
BL 299			1		4				1	1	1	1	2	1	1	1			
BL 301			1		3				1	1	1	1	3	1	1	1	1		1
BL 318			1		3				1	1	1	1	3	1	1	1			
BL 322			1		3		1		1	1	1	1	3	1	1				1
BP 379		1			4		1		1	1	1	1	1	1	2				2
BP 380		1			1		1		1	1	1	1	1	1	2				1
BP 387		1			2		1		1	1	1	1	1	1	2	1			1
10 Count	0	3	7	0	10	2	4	0	9	9	8	10	10	9	9	6	1	3	5
Total					26			0					21		12				8
Mean	0	0.3	0.7	0	2.60	0.2	0.4	0.00	0.9	0.9	0.8	1	2.10	0.9	1.33	0.6	0.1	2.67	0.5
DB 63			1		1	1	1	8	1	1	1	1	1	1	1				1
DB 67			1		1	1			1	1	1	1	1	1					1
DL 50			1		4	1	1	5	1	1	1	1	3						2
DL 53			1		3	1			1	1	1	1	3	1	1				1
DL 56			1		4		1	8	1	1	1	1	8	1	1				1
DL 62			1		1	1	1	4	1	1	1	1	1	1	1				1
DP 75			1		3	1	1	3	1	1	1	1	3	1	1		1		1
DP 78			1		3		1	2	1	1	1	1	3	1	6		1	1	1
DP 80			1		4	1	1	300	1	1	1	1	4				1	6	1
DP 81			1		3					1	1	1	1	1					
10 Count	0	0	10	0	10	7	7	7	9	10	10	10	10	7	6	0	3	6	7
Total					27			330					28		11				14
Mean	0	0	1	0	2.70	0.7	0.7	47.14	0.9	1	1	1	2.80	0.7	1.83	0	0.3	2.33	0.7

Coding: L=Livestock, P=Potatoe, B=Beekeping
A=Alexandria, B=Beheira, D=Dakahleya

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Appendix (A) ACDI Evaluation, May 1992

Farmer Sample Results

N=556, n=30 stratified two ways; Governorate & Commodity

COMMODITY ANALYSIS

(Yes=1)

Farmer No.	Q1-1	Q1-2	Q1-3	Q1-4	Q2	Q3	Q4	No.	Q5	Q6	Q7	Q8	No.	Q9	No.	Q10	Q10a	Q11	Q12
	Y, N				No.	Y, N	Y, N		Y, N	Y, N	Y, N	Y, N		Y, N		Y, N	Y, N	No.	Y, N
LD 50			1		4	1	1	5	1	1	1	1	3						
LD 53			1		3	1			1	1	1	1	3	1	1				2
LD 56			1		4		1	8	1	1	1	1	8	1	1				1
LD 62			1		1	1	1	4	1	1	1	1	1	1	1				1
LA 157		1			2		1	20	1	1	1	1	4	1	2		1	4	1
LA 162		1			2		1	200	1	1	1	1	5	1	2	1		5	
LA 166		1			4		1	25	1	1	1	1	1	1	3	1		6	
LB 299			1		4				1	1	1	1	2	1	1	1			
LB 301			1		3				1	1	1	1	3	1	1	1	1		1
LB 318			1		3				1	1	1	1	3	1	1	1			
LB 322			1		3		1		1	1	1	1	3	1	1				1
11 Count	0	3	8	0	11	3	7	6	11	11	11	11	11	10	10	5	2	5	5
Total					33			262					36		14			18	
Mean	0	0.27	0.72	0	3.00	0.27	0.63	43.67	1	1	1	1	3.27	0.90	1.40	0.45	0.19	3.80	0.45
PD 75			1		3	1	1	3	1	1	1	1	3	1	1			1	1
PD 78			1		3		1	2	1	1	1	1	3	1	6			1	1
PD 80			1		4	1	1	300	1	1	1	1	4				1	6	1
PD 81			1		3				1	1	1	1	1	1			1	6	1
PA 217		1			3		1	20	1	1	1	1	7	1			1	2	1
PA 222			1		1	1				1	1	1	2				1	1	1
PA 225		1			2		1	3	1	1	1	1	2	1	1	1		2	
PB 379		1			4		1		1	1	1	1	1	1	2			2	
PB 380		1			1		1		1	1	1	1	1	1	2			2	
PB 387		1			2		1		1	1	1	1	1	1	2	1			1
10 Count	0	5	5	0	10	3	8	5	8	10	10	10	10	8	6	2	5	6	7
Total					26			328					25		14			16	
Mean	0	0.5	0.5	0	2.60	0.3	0.8	65.60	0.8	1	1	1	2.50	0.8	2.33	0.2	0.5	2.67	0.7
BD 63			1		1	1	1	8	1	1	1	1	1	1	1			1	
BD 67			1		1	1			1	1	1	1	1					1	1
BA 162			1		3		1	4	1	1	1	1	3	1	1	1			
BA 164			1		1		1	7	1		1	1	1	1	1	1		4	
BA 185			1		1		1	4	1		1	1	4	1	1			2	
BA 187			1		1		1			1	1	1	3	1	3			1	
BB 337			1		1	1			1		1	1	4					4	
BB 342			1		3				1	1	1	1	1	1	1	1			1
BB 344			1		2	1				1	1	1	2	1	1	1		2	
9 Count	0	0	9	0	8	4	5	4	7	6	7	9	9	7	7	4	0	7	2
Total					13			23					20		9			15	
Mean	0	0	1	0	1.63	0.44	0.55	5.75	0.77	0.66	0.77	1	2.22	0.77	1.29	0.44	0	2.14	0.22

Coding: L=Livestock, P=Potatoe, B=Beekeping
A=Alexandria, B=Behaira, D=Dakahleya

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أستمارة استقصاء

١ - ماذا تعرف عن المشروع ؟
من آخرين بالمنطقة مندوبين المشروع الارشاد الزراعي النشرات الارشادية

٢ - ماهى العمليات التى تقوم بها الآن مختلفه عما كان يتم سابقا ؟

--	--	--	--

٣ - هل أنت الشخص الوحيد فى المنطقه ؟

	لا		نعم
--	----	--	-----

٤ - هل تم نقل هذه المعلومات الى جهات أخرى كم العدد

--

٥ - هل ترغب فى السفر الى امريكا مرة اخرى ؟

	لا		نعم
--	----	--	-----

وهل ترغب ان تشارك فى تكاليف البرنامج

	لا		نعم
--	----	--	-----

٦ - هل تم تطبيق اى معلومات اعطيت من طريق المشروع ؟

	لا		نعم
--	----	--	-----

٧ - هل هناك مائد من هذه التطبيقات

	لا		نعم
--	----	--	-----

٨ - هل تتكرر الزيارات من الم شروع ؟

لا

نعم

كم العدد

٩ - هل ترغب في مزيد من الزيارات ؟

لا

نعم

كم مـره في الشهر

١٠ - هل يتم امدادك بالنشرات الارشاديه

لا

نعم

هل هي كافيه

١١ - كم عدد الاجتماعات التي حضرتها ؟

١٢ - خدمات الجماعات مطلوبه الاجر هل ترغب في اجرائها

Appendix B. Summary of Figures From ACDI Reports

June 16, 1992

ACDI Evaluation - Time Series Analysis of Outputs

Month Number		Total Number of Participants	Project Target	Cumulative Actual No. Participants	Cumulative Target No. Participants	Days In U.S.	Number of Extension Agents	Number of Village Meetings	Project Target	Number of Farmers in Demos	Project Target	Video Produced	Project Target
1	Jun-90	0	0	0	0	0	0						
2	Jul-90	0	0	0	0	0	0		3		125		0
3	Aug-90	0	0	0	0	0	0		3		125		0
4	Sep-90	0	3	0	3	0	0		4		125		0
5	Oct-90	0	3	0	6	0	0	17	6	584	125		1
6	Nov-90	0	4	0	10	0	0		7		125		1
7	Dec-90	0	3	0	13	0	0		7		125		1
8	Jan-91	5	3	5	16	160	1	11	3	306	125		1
9	Feb-91	0	3	5	19	0	0		3		125		1
10	Mar-91	0	3	5	22	0	0	121	3	1375	125		1
11	Apr-91	0	4	5	26	0	0		4		125		1
12	May-91	7	4	12	30	126	2		4		125		1
13	Jun-91	0	5	12	35	0	0	206	4		125		2
14	Jul-91	5	5	17	40	150	1		5	3690	125		0
15	Aug-91	8	5	25	45	240	1		5		125		1
16	Sep-91	9	5	34	50	263	2	195	5	2904	125	3	1
17	Oct-91	5	5	39	55	125	1		5		125		1
18	Nov-91	0	5	39	60	0	0		5		125		1
19	Dec-91	4	6	43	66	124	1	74	5	670	125	2	0
20	Jan-92	7	6	50	72	210	2		5		125		1
21	Feb-92	4	7	54	79	116	1		5		125		1
22	Mar-92	6	7	60	86	150	1	47	5	2841	125	1	1
23	Apr-92	17	7	77	93	468	3		5		125		1
24	May-92		7		100				5		125		1
25	Jun-92		6		106				5		125		1
26	Jul-92		6		112				6		125		1
27	Aug-92		7		119				6		125		1
28	Sep-92		7		126				7		125		2
29	Oct-92		7		133				7		125		2
30	Nov-92		7		140				7		125		2
31	Dec-92		6		146				7		125		2
32	Jan-93		6		152				5		125		0
33	Feb-93		7		159				5		125		0
34	Mar-93		7		166				5		125		0
35	Apr-93		7		173				5		125		0
36	May-93		7		180				5		125		0
									5		125		0
Total		77	180			2132	16	671	180	12350	4500	6	30

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Appendix B. Summary of Figures From ACDI Reports

June 16, 1992

ACDI Evaluation - Time Series Analysis of Outputs

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Month Number	Number Volunteers	Project Target	Days in Egypt	Actual Cumulative Volunteers	Target Cumulative Volunteers	Number of Farm Visits	Project Target	Actual Cumulative Farm Visits	Target Cumulative	Number of New Tech. Recom.	Number of New Tech. Adopted	Project Target	Actual Cumulative Adopted	Target Cumulative Target
1 Jun-90	0	3	0	0	3	0	100	0	100	0	0	0	0	0
2 Jul-90	2	3	58	2	6	46	100	46	200	7	6	0	6	0
3 Aug-90	2	4	54	4	10	50	100	96	300	17	14	0	20	0
4 Sep-90	2	6	64	6	16	47	200	143	500	13	10	3	30	3
5 Oct-90	5	7	149	11	23	177	200	320	700	15	9	3	39	6
6 Nov-90	1	7	31	12	30	30	200	350	900	12	5	3	44	9
7 Dec-90	0	3	0	12	33	0	100	350	1000	0	3	3	44	12
8 Jan-91	3	3	57	15	36	63	100	413	1100	17	11	3	55	15
9 Feb-91	0	3	0	15	39	0	100	413	1200	0	0	3	55	18
10 Mar-91	0	3	0	15	42	0	100	413	1300	0	0	3	55	21
11 Apr-91	3	4	117	18	46	101	100	514	1400	19	17	3	72	24
12 May-91	0	4	0	18	50	0	100	514	1800	0	0	3	72	27
13 Jun-91	3	5	69	21	55	62	150	576	1850	5	3	3	75	30
14 Jul-91	2	5	58	23	60	60	150	636	1800	0	0	3	75	33
15 Aug-91	2	5	66	25	65	28	150	664	1850	11	8	3	83	36
16 Sep-91	5	5	149	30	70	125	150	769	2100	40	27	3	110	39
17 Oct-91	6	5	212	36	75	226	150	1015	2250	19	13	3	123	42
18 Nov-91	4	5	132	40	80	111	150	1126	2400	29	24	3	147	45
19 Dec-91	0	5	0	40	85	0	150	1126	2550	0	0	3	147	48
20 Jan-92	7	5	238	47	90	248	150	1374	2700	22	19	3	166	51
21 Feb-92	5	5	167	52	95	127	150	1501	2850	11	11	3	177	54
22 Mar-92	3	5	102	55	100	93	150	1594	3000			3		57
23 Apr-92	7	5	196	62	105	132	150	1726	3150			3		60
24 May-92		5			110		150		3300			3		63
25 Jun-92		6			116		200		3500			3		66
26 Jul-92		6			122		200		3700			3		69
27 Aug-92		7			129		200		3900			3		72
28 Sep-92		7			136		200		4100			3		75
29 Oct-92		7			143		200		4300			3		78
30 Nov-92		7			150		200		4500			3		81
31 Dec-92		5			155		150		4650			3		84
32 Jan-93		5			160		150		4800			3		87
33 Feb-93		5			165		150		4950			3		90
34 Mar-93		5			170		150		5100			3		93
35 Apr-93		5			175		150		5250			3		96
36 May-93		5			180		150		5400			4		100
Total	62	180	1919			1726	5400			237	177	100		

Schedule and List of Persons Contacted in Conjunction with this Evaluation

FTF Selection Committee Members

Mr. Mohamed Dessouki, Consultant to the Ministry of Agriculture, Supervisor of the Projects with ACDI - ACDI's Prime contact at the Ministry of Foreign Affair Department.

Mr. Mostafa Abu Rayia, General Manager in the Department of Agriculture

Mr. Abdel Aziz El-Saghir, Under Secretary of Agriculture, Kaiyobia Governorate

Dr. Fouad Kamal Reda, Consultant to the Ministry of Agriculture

Mr. Ahmed Nouseir, Project Manager, T.V. Agricultural Series

ARC/NARP

Dr. Abdullah Nassib, Senior Technical Coordinator, NARP

Dr. Don Esslinger, Technology Transfer Advisor

USAID/Cairo

Francis (Ken) Lyvers, AGR/A

John Warren, AGR

Rollo Ehrich, AGR/ACE

Douglas Clark, AGR/AD

Randolf Parks, PDS/P

Karim Gohar, HRDC, PVO Officer

Mohamed A. Sherif Omran, AGR/ACE

Leonel Pizarro, DIR/CS

Appendix (D). Schedule and Persons Contacted

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N**

ACDI Staff

Jeffrey G. Sole, Vice President, ACDI

Sarah Jackson, Program Coordinator, M.E. Regional Office

Mahmoud H. Kamel, FTF Director

Suzy Beltagi, Program Assistant

Mohamed Khafagi, Field Coordinator, Alexandria Office

Hanan A. Salam, Secretary

K. Basta, Administrative Assistant

A. El-Sherbini, Field Assistant & Translator

N.A. Nasr, Field Assistant & Translator

A. Zakaizak, Field Assistant & Translator

A. El-Gharbi, Field Assistant & Translator

H. Abu Ali, Field Assistant & Translator

Mohamed El-Shinawy, Field Coordinator, Mansoura Regional Office

Gehan Girgis Khalil, Secretary

Abd El-Basset El-Sarawy, Administrative Assistant

Hamdi Attia, Field Assistant

Mahmoud Taha, Field Assistant

G. El-Barbari, Translator

Abed Radwan Mohamed Gaber, Field Assistant & Translator

W. Rarkour, Translator

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Appendix (D). Schedule and Persons Contacted

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U.S. Volunteers

Walter D. Krause, Grape Physiologist, U.S. Farmer

Milton Workman, Potato Physiologist, Professor, Colorado State University

Amos Burgo, Temperate Fruit Physiologist, U.S. Farmer

Curtis Lynn, Grape Grower, U.S. Farmer

Robert Stoltz, Potato Entomologist, Professor, Idaho State University

Mansoura Field Office Site Visit

Aly El-Htaby, Farmer

Ibrahim El-Htaby, Farmer

Farouk Badawy, Farmer

Ibrahim Abd El-Mohsen, Farmer

El-Sherbiny El-Said Aly, Farmer

Moustafa El-Sherbiny, Farmer

Shoker Taha, Farmer

Mohamed Ahmed Abas, Farmer

Mohamed Shereen Wahab, Farmer

Eng. Ahmed Hafez, Mansoura MOA Director General

Soliman Salam Shahin, Farmer

Mohamed Abd El-Moniem, Farmer

El-Said Aly Dawoud, Farmer

Mohamed Sorour, Farmer

Dr. Mohamed A. El-Wakil, Faculty of Agriculture, Mansoura University

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Appendix (D). Schedule and Persons Contacted

Dr. A. El-Hossieny, Faculty of Agriculture, Mansoura University

Dr. Yasser M. Shabana, Faculty of Agriculture, Mansoura University

Fathy Arafa, Farmer

Mahmoud Saeed Omar, Head of Agricultural Extension Department, Ketour

Attef Amer, Farmer

Samir Ezzat Mohamed, Farmer

Mohamed Rady Amin Abou Hassan, Farmer

Dr. Ramzy El-Bedewy, Scientific Associate, International Potato Center (CIP)

Eng. Hossam El-Kholly, Tanta Motor Company

Alexandria Field Visit

Mohamed Gad Mohamed Gad

Ahmed Mohmoud Hegazy

Hazem Abou Ras

Makboul Nagg Mohamed El-Gehmy

Mohamed El-Hossiny Ghazy

Mona Saad Mohamed Kobtan

Nasr El-Din Mahrous Soliman

Ahmed Abd El-Rasol

Atef Adel El-Masry

Abd El-Hakim Abd El-Azim Amer

Esmail Mohamed Omran

Sherif Saad Mohamed Mohsen

Appendix (D). Schedule and Persons Contacted

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N**

Abd El-Salam Ebrahim Gado

Mohamed Ahmed Ali Ghazy

Dir. Aleh Soliman El-Nagar

Abd El-Kader Shahin

Khalil Esmail Yalees

El-Said Ahmed Zidan

Barakat Saleh Senosy

Essam Ramadan Mohamed

Ramadan Mohaved Abd El-Hady

Mohamed Sami Ghallab

Mohamed Ami Khalifa Dawod

Ahmed Hussien

Mohamed Abo El-Magd Rabie

Mohamed Kamel Moustafa

Samir Farag

Saad Abd El-Latif

Kassem Dif Mansour

Marey Dif Mansour

Soad Abo Shahin

Ebrahim Abdel Wanis

Mabil Abd Alab

Abd Alah Abd Helal

Mohamed Khalifa

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Appendix (D). Schedule and Persons Contacted

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L
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A
T
I
O
N**

Faad Abdou

Mohamed Abd El-Halim Khalaf

Hussien Ahmed Mohamed Hussien

Dr. Mohamed Farid El-Ganzory

Mohamed Farid El-Ganzory

A.E. Alaa El-Din Abd El-Magid

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ACDI Evaluation (Appendix D)

MAY - JUNE 1992

May 6, 1992

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
MAY	3	4	5	6	7	8	9
			Meet with ACDI, USAID; Arrange preliminary schedule L-1/4, K-1/4	Initial ACDI Briefing, get list of people to see, draft detailed field schedule L-1/2, K-1/2	Finalize contract with USAID, begin scheduling meetings, review background documents; L-1/2	Create stratified random sample of outputs, finalize field visit L-1, K-1/2	Draft workplan, review documents L-1, K-1/2
	10	11	12	13	14	15	16
	Submit workplan to USAID, review documents, prepare for field site visit L-1	Field visit with US volunteer L-1, K-1	Field visit with US volunteer, ACDI field staff L-1, K-1	Field visit with US volunteer, Governorate and University Officials L-1, K-1	Meet with USAID, finalize schedule for next field trip, analyse first field trip L-1, K-1/4	Review Progress, Draft Report Outline, Prioritize Tasks. L-1/2, K-1/4	Review Progress, Draft Report Outline, Prioritize Tasks L-1/2, K-1/4
	17	18	19	20	21	22	23
	Prepare for field site visit in Delta Governorates L-1, K-1/4	Field Site Visit L-1, K-1	Field Site Visit L-1, K-1	Review and Assess Field Data L-1, K-1/2	Review and Assess Field Data L-1, K-1/2	Review and assess field data L-1, K-1/2	Determine if second site visit necessary L-1/2, K-1/2
	24	25	26	27	28	29	30
	Field Site Visit L-1, K-1	Field Site Visit L-1, K-1	Prepare Report L-1, K-1/2	Prepare Report, Brief USAID, ACDI on Progress L-1, K-1/2	Prepare Report L-1, K-1/2	Prepare Report L-1, K-1/2	
	31	JUNE 1	2	3	4	5	6
	Finish Draft/ Prepare Report L-1, K-1/2	Finish Draft/Prepare Report L-1, K-1/2	Debriefing with USAID/ACDI / submit draft report		Incorporate Comments into Draft Report		Submit final report to USAID on June 7th

LOE: Levenson - 23.75 days

LOE: Kamel - 14.75 days