Tiedtke Draft 4/79 9320069 (3)

PROJECT EVALUATION SUMMARY (PES) — PART I

Report Symbol

1. PROJECT TITLE: PD-AAK-252
Meals for Millions Foundation, DPG

2. PROJECT NUMBER: 932-0069

3. MISSION/AID/W OFFICE: PDC/PVC

4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY)

5. KEY PROJECT IMPLEMENTATION DATES

A. First PRO-AG or Equivalent	B. Final Obligation Expected	C. Final Input Delivery
FY 76	FY 78	FY 78

6. ESTIMATED PROJECT FUNDING

A. Total $ _____

B. U.S. $ 483,000

7. PERIOD COVERED BY EVALUATION

From (month/yr.) 6/75

To (month/yr.) 5/78

Date of Evaluation Review 5/26/78

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions, including those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
Provide final funding	Rohla	6/78

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

- [ ] Project Paper
- [ ] Financial Plan
- [ ] Logical Framework
- [ ] Project Agreement
- [ ] Implementation Plan e.g., CPI Network
- [X] PIO/T
- [ ] PIO/C
- [ ] PIO/P
- [ ] Other (Specify) _____
- [ ] Other (Specify) _____

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

A. [ ] Continue Project Without Change

B. [ ] Change Project Design and/or [ ] Change Implementation Plan

C. [ ] Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

M. Rohla, PDC/PVC
Peter Davies, President
Kenneth Shewmon, Program Director

12. Mission/AID/W Office Director Approval

Signature: John A. Ulinski

Typed Name: JOHN A ULINSKI JR.

Date: 6-15-78

AID 1330-15 (3-78)

PROJECT EVALUATION SUMMARY

UNDER THE

DEVELOPMENT PROGRAM GRANT

OF THE

MEALS FOR MILLIONS FOUNDATION

JUNE 1, 1975 - MAY 31, 1978

May 26, 1978

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13. SUMMARY

The DPG has improved MFM's program capability in four ways:

1) Program development and implementation.

Increase in size and skill levels of staff have allowed MFM to respond to field needs more professionally and systematically. MFM is today better able to develop and implement new, more relevant, projects.

2) Development of projects in the field.

Permitted MFM staff to travel and to develop projects in countries which would not have been possible without the DPG.

3) Interaction with other development organizations.

Enabled MFM staff to interact with other private voluntary organizations engaged in international development. These have included World Education (Ghana); Technoserve (Ecuador); Project Concern (Bolivia); VITA (Technology Transfer; Emerging Economies Corp./Overseas Development Opportunities (Korea), among others.

4) Assessment of direction of MFM.

Two retreats (January 1977 and January 1978) centered on the needs of the field and how a small, narrowly focused agency can respond to those needs.

13. SUMMARY (cont'd.)

Result: The Foundation has shifted from emphasis on capital intensive production of protein-rich food products to an agency capable of responding to food and nutrition needs of rural and urban low income poor, through food technology transfer, nutrition education and applied nutrition programming.

The present momentum will be severely curtailed if AID support is interrupted. The DPG has been of great value in building MFM's program and technical staff. It has provided the cutting edge, or margin, to reach a point where MFM is able to develop effective food development and nutrition education programs that can attract private funding on a project basis. MFM has not yet achieved a point where it could depend on "matching grants" in place of a special support grant.

The specifics regarding staff size, skill level, travel, interaction with other PVO's, are detailed in response to Questions 18, 19 and 20. The shift in program emphasis is discussed in answers to Questions 17 and 21.

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14. EVALUATION METHODOLOGY

MFM staff reviewed trip reports and other data to provide the following self-evaluation. The content and degree of specificity of this PES were discussed with the AID Project Manager. Much of the qualitative analysis on the effect of the DPG on Meals for Millions is contained in answers to the Supplementary Questions.

MFM continued to monitor and evaluate its progress through the use of three internally developed forms:

1. Project Objective Outline (POO)
2. Project Activity Schedule (PAS)
3. Project Status Report (PSR)

A quarterly program review is conducted, and periodic reviews of individual programs and policies are held as needed. (The above forms are included in the appendices.)

16. EXTERNAL FACTORS

1) As noted in response to Question 19, inflation and the political unrest brought on by drought in the north of Ghana, led to a decision not to proceed with a joint project with World Education to produce a weaning food at the village level, and to provide nutrition education.

2) A project to produce a low-cost high protein beverage in Guayaquil, Ecuador, was terminated after it was determined that MFM was not able to find a suitable collaborator -- either private or government.

16. EXTERNAL FACTORS (cont'd.)

3) The genesis of the Korean Comprehensive Rural Nutrition Project (described in Question 19) was the end of the PL 480 Food for Peace food distribution program in Korea. This resulted in the Koreans approaching MFM as to its interest in assisting them to develop a local substitute.

17. GOAL/SUBGOAL

Following an extensive period of self-evaluation conducted by both the Board of Trustees and the staff (with assistance from New TransCentury Foundation under its management services grant with AID), the goal of MFM is:

> " . . . to provide people in developing communities with the technical, material and educational assistance they need to develop their own capabilities to use the resources around them to improve their nutrition. In particular, Meals for Millions will help these communities utilize appropriate food and nutrition knowledge and technologies to improve the nutritional status of their most vulnerable groups -- infants, young children and pregnant and lactating women."

This broad goal encompasses reaching the poorest, most vulnerable groups at the village level with a technology that can be adapted to their needs. Emphasis is given to nutrition education and integrated applied nutrition programs as discussed more fully in response to Question 18.

18. PURPOSE

A. Purpose of Grant

As stated in the original March 1975 proposal for obtaining a Development Program Grant, the purpose of the grant is:

> " . . . is to allow MFM to obtain additional talent which, together with the present programming resources of MFM, will allow for planning, programming, management and evaluation."
>
> "Since the program planning in MFM is addressed essentially to transfer of technologies and specialized training . . . the new staff to be added should have capability to plan and develop nutrition and food technology as well as develop specialized training programs, stressing low cost high nutrition foods in the LDC's based on locally available resources and local participation."
>
> "Similarly, primary program facilities of MFM are the pilot plant and laboratory which are used for training, research and development related to program plan and design, in the sense of program planning and evaluation to assess in-country source of raw materials for LCHN foods, information upon which the projects are programmed.
>
> "The requested grant seeks to improve these facilities, commensurate with the program development expected from the added professional staff."

B. Progress During EOPS

Progress to achieve this purpose has been significant as follows:

I. Staff:

Before the DPG commenced in 1975, there were eleven non-program staff and five program and technical staff, including:

18. PURPOSE OF GRANT (cont'd.)

Executive Director
Program Director
Plant Manager
Librarian
Project Director, Ecuador

During the three years of the DPG, the following staff additions were made in the United States:

Associate Program Director
Nutritionist
Food Development Researcher
Food Technologist
Latin American Program Director
Training Coordinator
Administrative Assistant
Secretary

In the field, the following were added, none of whom were charged to the DPG:

Asia Program Director, based in Korea
Associate Director, Korea
Three Nutritionists, Korea
Three Ecuador Agronomists
Food Technologist, Jamaica

More important than numbers, is the skill level of these additional DPG and non-DPG staff. They include three PH.D.'s in food technology and food science; two with extensive industry experience; a nutritionist with an MPH and MS degree in nutrition; an Asian Program Director with eighteen years in Korea as a priest working in rural development; a Latin American Program Director with five years in Honduras directing rural development as Peace Corps staff; a Program Director with African Peace Corps

18. PURPOSE OF GRANT (cont'd.)

and teaching experience; a trained librarian. The enhanced skill level permits the staff to assess programs from a technical and programming viewpoint and to provide technical assistance in the areas indicated in III below.

Copies of the curriculum vitae of each staff member, included in the appendices, demonstrate the high level of skill that has been brought to MFM as a direct result of the DPG. (See Appendix 1)

NOTE: The Latin American Coordinator was a position approved in 1976, after the initial grant in 1975, to facilitate the development and implementation of field programs. The Associate Program Director was named Program Director. The Training Coordinator left at the beginning of 1978 and is replaced by the Technical Director (Dr. Hugh Roberts, PH.D., former Executive Director of the League for International Food Education).

II. Facilities:

The pilot plant, kitchen and laboratory facilities were substantially re-equipped and upgraded under the DPG so that students in the training course and the technology transfer program described in answer to Question 19 can now be carried forward more effectively. Approximately $34,400 of the DPG grant was used to upgrade these facilities.

III. Programming:

The addition of the new program and technical staff under the DPG has enabled MFM to improve its

18. PURPOSE OF GRANT (cont'd.)

programming, project and technical development and training capability. Thus, MFM is now in a position to implement:

- applied nutrition and rural development at the village level;
- training and technical assistance in food technology transfer;
- training and technical assistance in nutrition education;
- training and technical assistance in the programming of nutrition and food processing technology;
- information on appropriate food processing technology and nutrition education.

The kinds of training, technical assistance and applied nutrition programs are explained in the narrative answer to Question 19, below.

C. Change in Emphasis

At the start of the DPG, as indicated in the purpose ("A" above), the primary emphasis of MFM was to develop a suitable technical intervention to produce low cost, high protein foods, using locally grown materials, for distribution to the most vulnerable groups in the population. The objective was to organize small business enterprises in collaboration with local private entrepreneurs. The assumption was that by developing the cooker-extruder technology (in which MFM was already engaged) an effective way would be provided to improve the nutrition of the most vulnerable groups.

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18. PURPOSE OF GRANT (cont'd.)

It was further assumed that forming a small company with local entrepreneurial inputs and marketing these products were within the capability of a PVO, both financially and from a competitive standpoint. Over the period of the DPG, the new staff and the MFM Board of Trustees continuously questioned the validity of these assumptions for a PVO, and the potential effectiveness of such a strategy as the best way to reach the poorest majority in LDC's. This questioning has led to restructuring of activities and to a re-orientation of the institution.

As noted in response to Question 19 (see Ecuador Marketing Project), MFM came to realize by May 1977 that the capital equipment and business skills needed, required an investment of more than $500,000, and that the high cost of producing centrally processed foods might not permit selling them at a cost that low income consumers(i.e. the target group) could afford. The absence of a suitable collaborator, and the questioning of the hypothesis, led MFM to terminate its project to produce a low cost high protein food product in Guayaquil, Ecuador.

Nevertheless, MFM has continued to develop its cooker-extruder and, in collaboration with several Korean private and government institutions, is proceeding to

18. PURPOSE OF GRANT (cont'd.)

produce low cost high protein foods in a rural county of South Korea, for distribution to 10,000 of the most vulnerable group (0-6 year old children and pregnant and lactating women) as described in response to Question 19 (see Korean Comprehensive Rural Nutrition Project).

The kinds of training (extrusion technology, textured vegetable protein, protein beverage) which MFM conducted in its Training School (International Institute of Protein Food Technology) reflected the capital intensive programming of projects such as Ecuador. Demand for this training is high. The number of those trained has increased from zero in 1974 to four in 1975; twenty in 1976; and thirty in 1977. Participants come from industrial companies, government research institutions and universities in the LDC's. As noted in answer to Question 19, (see Training School), most of the students are highly trained food technologists and food nutritionists with advanced graduate degrees.

For 1978, as an experiment with the objective of training persons who are working more directly at the village level, MFM has redesigned the Training School curriculum. It is now focused on village level technology , including weaning foods, kitchen level food production, the small scale village texturizer, and nutrition for small children. MFM has been successful

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18. PURPOSE OF GRANT (cont'd.)

by collaborating with PVO's and church groups, in finding individuals who are working at the village level in food production and nutrition who will benefit from this course.

19. OUTPUTS AND INPUTS

Under the DPG, MFM has initiated a number of programs that it could not have undertaken without having enhanced the number and skill level of its staff, as indicated in response to Question 18. The following extensive description serves to highlight the outputs and inputs, project by project.

I. Ecuador Soy Agricultural Production Project

In the particularly arid Santa Elena Peninsula of Ecuador, MFM has been assisting the Ecuadorian villagers to plant soy in an area which has never grown this high protein crop before. The objective has been to provide a cash crop in accordance with the Government's incentive price for soy. The program, which started before the DPG, was materially expanded during the DPG period, with funding from PACT in the amount of $50,000 in 1976 and another $50,000 in 1977. Church World Service, the United Methodist Committee on Relief, and the Presiding Bishop's Fund of the Episcopal Church have provided additional funds totalling $56,800 in 1977.

MFM has provided intensive technical assistance in the cultivation of soybeans, providing farm and irrigation

19. OUTPUTS AND INPUTS (cont'd.)

equipment and arranging for credit from Fondo Ecuatoriano Populorum Progressio (FEPP).

It has:

- introduced the cultivation of soybeans;
- trained farmers in the use of agricultural equipment;
- helped them to obtain credit;
- helped them to market the soy;
- organized the farmers into "cooperatives" attempting to obtain legal status for these groups.

The DPG funded Latin American Program Director has supervised, trained, motivated and evaluated three Ecuadorean nationals (two of whom are agronomists) in the techniques for providing effective technical assistance to these poorest of the poor farmers. Over 75 man-months of technical assistance have been provided in the communities. Results have been impressive:

- Seven communities assisted, with over 150 farmers directly participating;
- Cultivating over 130 hecátares of soybeans;
- Farmers have been growing vegetables for their own consumption and for sale in the local towns;
- Some nutrition education has also been provided.

Of greater significance than the number of farmers assisted, is what was accomplished in social community development terms -- values that cannot be measured statistically.

19. OUTPUTS AND INPUTS (cont'd.)

The establishment of viable farmer organizations with their own president, secretary, treasurer, and the pride and dignity achieved in extremely primitive communities where the government is only now (in part as a result of MFM's pioneering efforts) tentatively extending agricultural extension services. MFM is now arranging to pass the mantle on to FEPP and other local Ecuadorean groups, as well as the Ministry of Agriculture, but will not terminate its participation in the program until a satisfactory plan has been developed to assure that the agricultural extension and credit services are available after its departure.

II. Korean Comprehensive Rural Nutrition Project

In 1976, MFM initiated a five year nutrition program to improve the diets of young children and mothers in a low-income rural area of Korea by producing and distributing a low cost high protein food in Wonseong County, with a population of 64,000. The target is 10,000 poorer, at-risk residents of the County -- infants and young children (age 0-6), and pregnant and lactating women.

Additional objectives are:

- to transfer vegetable protein food technology by building, testing and operating the MFM-designed low cost cooker-extruder to produce a high variety of high nutrition foods;
- to develop an effective nutrition education program to cover all 64,000 population (13,500 families

19. OUTPUTS AND INPUTS (cont'd.)

- to cooperate with and develop the capacities of Korean local, provincial and national government personnel; the Korean Institute of Science and Technology; and the Korean University Medical School, to carry out this comprehensive multi-faceted model project.

The Project Manager, Rev. Michael McFadden (not covered by DPG funds) is resident in Seoul. He supervises a Korean staff of an associate director, three nutritionists, an administrative assistant and a secretary.

The DPG staff in Santa Monica is heavily engaged in providing backup technical support in food technology, nutrition and management. Outside consultants have been used to assist in the financial and business management planning (notably Emerging Economies Corporation/Overseas Development Opportunities).

At least 46 man-months have been devoted to the planning, product development, product testing, plant layout, supplementary equipment specification and purchase, design, assembly, testing and training on the MFM extruder, and financial and business management.

An additional 7 man-months have been devoted to design, negotiation and consultation on the nutrition education program, by the MFM nutrition planner and Korean nutritionists.

A three year Operations Program Grant for $199,412 was signed by the USAID Mission Director and Rev. McFadden, MFM Asia Program Director, on February 10, 1978.

19. OUTPUTS AND INPUTS (cont'd.)

The principal effects of the nutrition education program will be:

- to develop a system for transmitting nutrition information to the people of the County;
- to motivate county people to consume a balanced diet.

Long range benefits are:

1. "Better nutrition through nutrition education resulting in less illness and greater productivity, income and improved standard of living."
2. "Increased awareness by the Government of Korea, from county to national level, regarding the importance of nutrition for the well-being of the population and possibility of replication."
3. "High potential for reaching large numbers of low income people in other countries through interest shown to date by other voluntary agencies working in the Far East region."

Korean participants in the training in nutrition include:

- 51 social workers;
- 64 elementary school teachers;
- 250 Saemaul (New Community) village leaders;
- 50 Homeland Reserve forces;
- and a number of county level government officials.

A copy of the OPG is attached as Appendix 2. Accomplishments during the DPG period, respecting the high protein food product are manifold.

Completed:

- built a prototype MFM cooker-extruder at KIST;
- trained three Koreans in extrusion technology, etc. at MFM Training School;
- trained KIST food technologist and engineers on-site;
- formulated several products at KIST;
- conducted animal feeding tests;
- specified equipment and ordered it;
- conducted consumer tests.

19. OUTPUTS AND INPUTS (cont'd.)

In process:

- plant layout;
- refinement of product and development of additional products;
- further consumer acceptability tests;
- packaging and shelf-life tests;
- plant power requirements;
- plant labor needs determined;
- quality control-quality assurance procedures;
- manufacturing costs determined;
- business plan formulated.

Accomplishments on the nutrition education program to date:

Completed:

- nutrition education program designed;
- Operations Program Grant obtained;
- extension workers trained to conduct the survey;
- base-line nutrition survey completed;
- nutrition evaluation procedures agreed to.

In process:

- analysis of data obtained in survey/Homeland Forces and training of teachers, village workers, county officials;
- nutrition evaluation by University of Korea Medical School;
- Nutrition Coordinating Advisory Committee meetings.

All of the above steps have been completed or are in process only because MFM has succeeded in establishing a coordinating committee structure among the participating Korean institutions to assure that this multi-faceted program moves forward in an organized and efficient manner. A modified PERT chart was developed with the help of Overseas Development Opportunities and is being monitored and used as a key management tool. (See Appendix 2 for Status Report on Project)

19. OUTPUTS AND INPUTS

To carry out this program has required MFM to raise money from a multiplicity of sources, including $22,500 from PACT in 1977 and $72,435 in 1978; $20,000 from United Church Board for World Ministries in 1977 and $12,100 in 1978; $199,000 from USAID/OPG for three years; and the use of at least $50,000 of MFM general funds during 1976-78, excluding the cost of DPG funded program and technical staff to provide the technical inputs.

Cost of ancillary equipment, shipping and installation are estimated to exceed $100,000 over the next seven months, May - December 1978.

The Korean Government's financial and personnel investment in this comprehensive model project is at least twice as high as MFM's direct and indirect costs, including site acquisition, salaries of project personnel, etc.

III. Training School - International Institute of Protein Food Technology.

Since 1975, MFM has trained 53 food technologists and nutritionists in the latest developments in texturized vegetable proteins, extrusion technology, vegetable beverages, infant formulas and weaning food products.

In 1975, it trained 4 students from 3 countries (Korea, India and Nigeria); in 1976, 19 students from 13 countries. In total, the 53 students came from 24 developing countries, with one from Denmark.

19. OUTPUTS AND INPUTS (cont'd.)

Utilizing the greatly improved laboratory, pilot plant and food processing equipment (including the MFM extruder, village texturizer, drum drier, spray drier and puffing gun), MFM refined the Training School curriculum, using outside guest lecturers to supplement its own food technologist, food engineer and nutritionist. The curriculum was broken into two four-week courses with most students attending both segments. (Appendix 3)

Topics covered included:

Course One: Texturized Proteins and Extrusion Technology

- Extrusion and non-extrusion methods of texturizing materials high in vegetable protein;
- Relationship between materials and machine operation in achieving a finished product;
- The methods of coloring and flavoring.

Course Two: Vegetable Beverages, Infant Formulas, Weaning Food Products

Part I:
- Aqueous extraction methods;
- Whole soy emulsion (full fat beverages);
- Beverages from protein isolates;
- Flavoring and coloring;
- Sensory evaluation of end products.

Part II:
- Nutritional needs of infants;
- Infant formulas;
- Weaning foods formulation.

Using the DPG funds to equip the laboratory, kitchen and pilot plant, MFM was able to build a course that has attracted persons with previous training in food technology and nutrition at the graduate level. These included 16 with BA, BE and BS degrees; 12 with MS degrees and 9 with Ph.D. degrees.

19. OUTPUTS AND INPUTS (cont'd.)

The students come from backgrounds in food technology, agricultural chemistry, nutrition and food science. They work in the food industry, food research institutes, universities teaching food science and nutrition. A comprehensive list of the students, their institutional affiliations, educational, industry and research experience is attached as Appendix 4.

During the three years of the Training School, 13 guest lecturers participated:

- 3 from the USDA Northern Regional Research Center;
- 3 from the Department of Agricultural Engineering of Colorado State University;
- 1 from the Institute of Food Science, Cornell University;
- 1 from the Department of Food Science, University of Illinois;
- 5 from industrial companies in the food industry.

During 1976 and 1977, two separate Training School Sessions were held -- in April-May and September-October, respectively. In this way, individual attention was devoted to each student to permit him or her to work on individual projects. Three newsletters and four sets of questionnaires have been sent to former students to track their progress in applying what they learned. The results are encouraging, as noted in detail in Appendices 4 and 5.

19. OUTPUTS AND INPUTS (cont'd.)

The transfer of technology and ideas that have been generated by participation in the course is hard to measure, and the payoff is not necessarily in the short-term. However, former students have been instrumental in generating new projects in which MFM has been asked to participate. These have included a project in the Philippines with the National Rural Life Center, application of the village texturizer in Ghana, Jamaica and Colombia, among other countries.

In particular, MFM has trained 3 students from Korea who are directly involved in the Korea Comprehensive Rural Nutrition Project (described elsewhere in this report, Question 19, II).

MFM staff has asked itself whether it is best to structure the course to reach as high an academic level in food technology and nutrition as has been the practice. There is demand for this training and MFM has been successful in obtaining a Jessie Smith Noyes Foundation grant in the amount of $15,670 in 1976, $32,010 in 1977, and $32,000 in 1978; $7,000 from the Presiding Bishop's Fund of the Episcopal Church; and $10,000 from Louisville Against Hunger to provide tuition, per diem and some travel funds to students.

The entire DPG staff has been intimately involved in planning and teaching the students in two courses held in 1976 and 77. In total, it is estimated that 45 man-~~hours~~ months of staff time have been spent on program design, teaching and administration of the Training School.

19. OUTPUTS AND INPUTS (cont'd.)

In 1978, MFM postponed its April course and redesigned the curriculum to make it more relevant to field workers active in smaller rural communities to enable them to plan, organize and implement nutritious food production in homes or on a small "village scale." The goal is to provide practical and applicable nutrition and food technology training for participants who do not hold a degree in food technology or nutrition. The response of church and PVO organizations has been encouraging. The newly designed training course will focus on the following subjects:

I. Nutrition education

II. Evaluation and formulation of food resources

III. Evaluation of commercial baby and children's food

IV. Kitchen level food production

V. Small scale production - village industry

VI. Small commercial food operations.

A full class of twelve to fourteen students have been recruited for June 1978 and are working with low income rural and urban families directly. It is too early to tell how well the course will serve the needs of these students, but the backgrounds of the current candidates for the 1978 revised course is attached as Appendix 6. The Course announcement is included as Appendix 7.

19. OUTPUTS AND INPUTS (cont'd.)

IV. Transfer of Appropriate Food Processing Technology.

One of MFM's unique capabilities, is to provide to developing communities simple food processing equipment that can utilize locally grown crops to produce high protein food products. MFM, in the period of the DPG, has developed or adapted five pieces of equipment: the MFM extruder, the village texturizer, drum drier, spray drier, and the puffing gun (the latter imported from Korea). The target is the rural and urban poor. But to reach this target it is necessary to orient and train persons with some food processing and food technology skills.

This has been accomplished through the Training School (see above), and by disseminating information on how to build, use, maintain, repair and adapt these simple machines to the needs of the communities in which they are made available. Under the DPG, MFM improved its pilot plant facilities, built a temporary machine shop and refined the technology. An estimated 42 man-months of the time of the food technologist, food engineer and plant maintenance personnel were devoted to developing this equipment.

- The MFM extruder, using a Ford automobile transmission, was built in the machine shop at MFM, was tested and is used during the Training School course. A prototype of the extruder has been built, also by the Korean Institute of Science and Technology (KIST).

19. OUTPUTS AND INPUTS (cont'd.)

MFM decided to limit further work on the MFM extruder until more experience has been gained in the Korean Comprehensive Rural Nutrition Project, where the KIST-built extruder will produce high protein foods in a factory setting. Several articles have appeared in Food Engineering, the Protein Advisory Group Journal, League for International Food Education Newsletter, on the extruder. (Appendix 8 includes articles on Extruder)

- Several of the village texturizers have been built and are used in the Training School. One has been sent to the Jamaica Industrial Development Corp. (at the request of a former student at the Training School); one to the Instituto de Investigacion Tecnologica in Colombia; and two to the Ghana Food Research Institute.

- One puffing gun has also been sent to the JIDC in Jamaica, one to Honduras Pan American Health Service (with a former student from the Training School); and one to the University of North Carolina, where it is being tested for use in Bolivia.

In collaboration with Volunteers in Technical Assistance (VITA), MFM has prepared a detailed handbook, THE VILLAGE TEXTURIZER - A low cost machine for preparing texturized food products at the village level.* One thousand copies of this "how to" manual have been printed. MFM has distributed over 200 in response to requests from over 20 countries. Seventy-six of these were given to former IIPFT students, and another 115 to other interested PVO's, universities, governments, foundations and businesses. (See Appendix 10 for a more detailed breakdown.) VITA is also offering the manual as part of its publication program.

A major initiative of MFM is to introduce The Village Texturizer into developing rural and urban communities

* (The Handbook is included as Appendix 9)

19. OUTPUTS AND INPUTS (cont'd.)

where it may be used to produce high protein foods using locally grown food materials. Called the Technology Transfer Project, MFM has (following an initial grant from PACT of $50,000 in 1975-76) received grants from two foundations during 1977-78 in the amount of $36,000. The objective: to select sites in three countries in 1978 to build and test the village texturizer in loco to determine how a piece of simple "appropriate" technology can best be introduced into a community -- whether through an entrepreneur, a cooperative or other institution. The project is being developed in collaboration with VITA staff.

V. Information Resource Center.

The Information Resource Center is an important component of MFM, supplying needed technical information to staff and students, as well as answering requests from overseas.

The current collection of food science, food technology and nutrition materials is being reorganized and expanded to include more appropriate or intermediate food technology material. The first step in this reorganization was the development of a classification system tailored to the collection. This collaborative

19. OUTPUTS AND INPUTS (cont'd.)

effort undertaken with VITA provided expertise based on their experience with information systems. FACT funded 50% of travel and per diem for five days of consultation.

Transferring food technology and nutrition, either through training or introducing technology, into LDC's, generates a need for technical information. The students in MFM training programs are always eager to obtain information to reinforce lectures and laboratory work. Requests for technical information in food and nutrition have been coming to MFM for a long time. While it is not MFM's aim to build a broad general collection to meet all information needs, it does serve as an intermediary, linking those needing information with its source, both material and people, using other information centers throughout the United States.

VI. Nutrition Education Workshop

The Nutrition Planner spent 9 man-months in 1977 developing a Nutrition Education Workshop attended by 28 participants from 10 developing countries, the United States and Sweden. The participants are involved in teaching semi-literate and illiterate people in the developing countries and poorer communities in the United States. The workshop participants

19. OUTPUTS AND INPUTS (cont'd.)

were not all nutritionists and came from Haiti, Guatamala, Philippines, Mexico, Western Caroline Islands, Botswana, Mariana Islands, Bolivia, Indonesia, Sweden and the United States. Extensive correspondence is being conducted to ascertain how the participants are using the techniques presented and discussed during the Workshop.

Following the Workshop, the Nutrition Planner edited the papers and prepared a book: (see Appendix 11 TEACHING NUTRITION IN DEVELOPING COUNTRIES or THE JOYS OF EATING DARK GREEN LEAVES, which provides provocative discussion of techniques for teaching nutrition to semi-literate and illiterate target populations. Four hundred copies of this book have been sent to 30 countries. An additional 500 copies are now being printed to respond to the numerous requests. MFM successfully raised the $25,000 necessary to organize the Workshop and produce the book, from three church groups and a foundation.

Three additional workshops are in the planning stage for 1979, in collaboration with World Education, Save the Children Federation and others.

A brochure on the Workshop, a biographical list of those attending the Workshop, and a breakdown of the distribution of the book, are included in Appendices 12 and 13.

19. OUTPUTS AND INPUTS (cont'd.)

VII. Bolivia Rural Health Delivery and Applied Nutrition Project. *

MFM entered this project in collaboration with Project Concern. At the invitation of the Ministry of Health, Project Concern was invited to develop a program of health services and training in nutrition improvement. In turn, it approached MFM. The project is located in the Department of the Pando, with a population of about 25,000. The objective is to train Bolivian village health promoters. Sixteen VHP's have already been trained.

MFM's role has been to:

- provide program design assistance to Project Concern, which has had less experience n this area;
- design surveys to be carried out to assess nutritional levels;
- review nutritional information gathered and design nutrition interventions;
- assist Project Concern in negotiating terms of the agreement to provide nutritional and other assistance.

MFM has provided five man-months of the Nutrition Planner and three man-months of the Program Director for Latin America, including two trips to Bolivia for each, in conjunction with Project Concern staff. In addition, MFM has specified and recruited for Project Concern a nutrition educator who is now resident in the Pando, along with three other technicians,

* (For a definition of applied nutrition programs, see Appendix 14.)

19. OUTPUTS AND INPUTS (cont'd.)

including a physician, environmental sanitarian, and nurse, recruited by Project Concern.

The experience to date has confirmed that greater emphasis must be given to training local Bolivian nationals resident in the communities to provide:

- primary care of the ill, and referral of more serious cases;
- maternal-child health care;
- teaching nutrition to mothers, in selection and preparation of locally available foods, with special emphasis on food needs of the young child and pregnant and lactating woman.

The project is proceeding, with MFM playing an increasingly prominent role in the program design and implementation, as requested by Project Concern. Additional VHP's are being trained to provide the health delivery services enumerated above and those detailed in the project proposal attached as Appendix 15.

VIII. Honduras Applied Nutrition Project.

In the last six months of the DPG, the Latin American Program Director has spent over two man-months on the design and negotiation of a rural community applied nutrition program in the Olancho District of Honduras. Over 60% of the children have some degree of malnutrition.

The Ministry of Health's five year outline for this area is to:

OUTPUTS AND INPUTS (cont'd.)

- strengthen the health delivery for its rural people;
- improve the living conditions by conducting integrated community development programs within this health delivery system;
- monitor the program through its personnel in the field.

Meals for Millions is assisting the Ministry to launch its program by conducting:

- a nutritional survey of children under the age of 15, and mothers, to include such measurements as height, weight, age, Vitamin A status, arm circumference, and check for diarrhea, kwashiorkior, marasmus and goiter;
- a general community study to determine the present status of education, sanitation, health, food availability, food prices, waste disposal, water supply and animal production.

MFM is conducting the survey, using locally trained personnel in six rural health posts, each of which serves a number of rural communities. A description of the project is included in Appendix 16.

IX. Jamaica Project with Knox Community Development Foundation and Walker Wood Community Council.

MFM has had a volunteer food technologist, a member of the Church of the Bretheren,* in Jamaica, working with the Knox Community Development Foundation and Walkers Wood Community Council. He has assisted Knox and Walkers Wood to develop:

- a food processing plant for pork and chickens;
- a cereal snack food using locally grown products;

* (Curriculum vitae of Glenn W. Patterson is Appendix 17.)

19. OUTPUTS AND INPUTS (cont'd.)

- use of papaya in tenderizing packaged meats;
- a simple process for making ice cream;
- simple sanitation and hygiene in hauling and processing.

MFM DPG staff (the Food Technologist and the Latin American Program Director) have assisted this volunteer by providing 2.25 man-months of technical information on food processing technology, including salting, drying, debittering of brewers yeast, among others. Also, a village texturizer and puffing gun have been sent to Jamaica and technical information provided on how to utilize these simple pieces of food processing equipment.

Further assistance has been provided to the Caribbean Food and Nutrition Institute (CFNI) to help it to plan a workshop on weaning foods, targeted to representatives of the Ministries of Health of 17 Caribbean countries. (See Appendix 18 on Weaning Foods Workshop for listing of MFM proposed inputs to this planned workshop.)

X. Kenya-Materi Irrigation Project.

In 1976, MFM provided irrigation equipment and advice on its use to the Materi Girls High School in a community of 40,000 villagers. The 400 girls work on a 20-acre experimental farm and are using the

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19. OUTPUTS AND INPUTS (cont'd.)

irrigated sprinkler system to grow vegetables and fruits. Approximately 2 man-months of assistance in specifying the equipment, advising on its use and evaluating the results, have been provided by the MFM Program Director. Brother John, Director of the School, writes that "the greatest benefits here are the facts that the local people themselves are working with the daily operation of the irrigation project and thus probably learning more than anybody else of its benefits and difficulties if there be any and also the Kenyan Ministry of Agriculture is taking a keen interest." (See Appendix 19)

XI. Ghana Rural Nutrition Project.

A project targeted at pre-school children and pregnant and lactating mothers in Kwahu Tafo, Ghana, with a population of 5,000, was designed and negotiated jointly with the Ministry of Health of Ghana, in collaboration with World Education. The program was to produce a weaning food using locally grown mung beans and corn. A non-formal education program was also included. The worsening political situation and extreme inflation in Ghana, brought on by severe drought in the north, caused MFM to terminate this program reluctantly, after providing about 16 man-months of effort on project design, including three trips to Ghana by the Nutrition Planner and the Program Director, respectively.

19. OUTPUTS AND INPUTS (cont'd.)

XII. Ecuador Production and Marketing of High Protein Product.

At the start of the DPG, MFM was engaged in an ambitious plan to design, produce and market a high protein soft drink using its own MFM designed cooker-extruder, targeted at 0-6 year old children. This project has been terminated. Nevertheless, MFM learned a great deal from the experience which is being successfully applied in Korea where a similar program is proceeding well (see description in Question 19, II above). A marketing study was completed, a product developed, a business plan drawn up and negotiations conducted with business firms and the Ministry of Education to introduce the product in an area of Guayaquil. A detailed final report on the lessons learned, prepared by John Wall, Project Manager in Ecuador (who was not paid by the DPG) is included as Appendix 20.

To Summarize the Outputs.

1) Extrusion technology has been transferred to Korea.
2) Fifty-three food technologist and nutritionists from 24 developing countries have been trained at the International Institute of Protein Food Technology Training School.

19. OUTPUTS AND INPUTS (cont'd.)

3) Twenty-eight nutritionists from 11 countries have participated in the Nutrition Education Workshop.

4) A nutrition manual, Teaching Nutrition in Developing Countries or The Joys of Eating Dark Green Leaves, is being distributed to field nutritionists, worldwide.

5) A manual, The Village Texturizer Handbook, has been produced in collaboration with VITA, and is being disseminated to over 500 inquirers, mostly in LDC's.

6) Applied nutrition projects are underway in 4 countries: Bolivia (with Project Concern); Ecuador; Honduras; and Korea.

7) Food technology transfer is being accomplished in Jamaica, and a project to organize a weaning foods technical training input is planned.

8) MFM is developing its capacity to provide food and nutrition expertise at the village level through its revised training curriculum; the village texturizer technology transfer program, and its information center.

9) Agricultural skills and machinery (including irrigation equipment and assistance in its use) have been transferred to the Kenya and Ecuador projects.

20. UNPLANNED EFFECTS

1. A particularly satisfying, but unexpected, outcome of the DPG is the relationship being developed among West Coast DPG recipients. Project Concern, Foundation for the Peoples of the South Pacific, and MFM have developed cordial working relationships which have led to collaborative programming efforts in Bolivia (Project Concern) and now Papua, New Guinea (Foundation for the Peoples of the South Pacific).

2. In the developing countries themselves, students graduated from the Training School have become a resource for collaborative projects, as is currently the case in the Philippines.

3. The favorable response of participants in the Nutrition Education Workshop held in June 1977 is leading to plans to hold three additional nutrition education workshops, one in Central America, a second in Asia, and one in the United States, in 1979.

This network of graduates from the Training School and the Nutrition Education Workshop is important to MFM's future effectiveness in its food technology transfer and nutrition education.

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21. CHANGES IN DESIGN OR EXECUTION

As stated in reply to Question 18 (C) above, MFM has, over the course of the DPG, altered its emphasis from "intermediate" technology which stresses the use of the cooker-extruder as a way to provide low cost high protein foods, to one which is broader in scope and designed to reach the village level more effectively with simpler food technology and through effective field-oriented nutrition education programs.

This change in design is articulated in Meals for Millions five year plan (1978-82) that was prepared with the assistance of New TransCentury Foundation under its AID management services grant. This plan was approved by the Board of Trustees at its Annual Meeting, May 2 - 3, 1978, and is attached as an Appendix 21.

22. LESSONS LEARNED

As indicated in answer to Questions 18 and 21, the program has been revised in light of the experience with the Ecuador Marketing Enterprise Project, and the heavy emphasis on extruder technology in the Training School curriculum. MFM has learned that large enterprise development is not suited to a PVO if it wishes to reach the "poorest majority." As articulated in the answers to earlier questions, MFM has, therefore, redesigned its program to more readily involve those who are working at the village level, or in marginal urban communities.

22. LESSONS LEARNED (cont'd.)

A particularly thoughtful memorandum on the "Lessons Learned" from the Ecuador Marketing Enterprise Project is included in Appendix 20, as noted in response to Question 19.

23. SPECIAL COMMENTS OR REMARKS

For many, many years MFM has depended on its loyal small contributors who are solicited through a direct mail campaign. This key financial support is expensive to maintain, given the increasing costs of direct mail (printing, postage, etc.). MFM has been able to hold its annual direct mail income at between $200,000 - $350,000 over the last four years.

One of MFM's greatest strengths in the last two years, however, has been its ability to develop programs (using DPG program and technical staff) that can attract private, foundation and church grants. This ability to attract new private sources of funding is extremely important to the expansion of MFM's financial base.

There are currently 9 new projects funded by general contributions and by these institutions. The growth in grants is best illustrated by the following list of grants received from foundations and churches in January - May 1978.

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SPECIAL COMMENTS OR REMARKS (cont'd.)

1977 Foundation, Church and PACT Contributions

Foundations	Purpose	Amount
Pew Memorial Trust	General	$ 10,000
Sherman Foundation	General	5,000
Trull Foundation	General	5,000
General Service Foundation	Technology Transfer	17,000
Jessie Smith Noyes Foundation	Training School-IIPFT	32010
International Foundation	IIPFT	6,000
Ahmanson Foundation	General & IIPFT	3,000
Compton Foundation	Nutrition Workshop	5,000
Public Welfare Foundation	(Nutrition Education (Consumer Outreach	5,000
Food for India Fund	India Projects	4,600
	Total Foundations	$ 92,610
Churches		
United Methodist Committee on Relief	Ecuador Agriculture	20,000
Church World Service	Ecuador Agriculture	20,000
Episcopal Church Presiding Bishop's Fund	Ecuador Agriculture	16,800
" " "	Training School-IIPFT	7,000
" " "	Nutrition Workshop	5,000
" " "	(Nutrition Education (Consumer Outreach	25,000
United Church Board for World Ministries	General	12,131
" " "	Training School-IIPFT	2,000
" " "	Nutrition Workshop	5,000
" " "	Honduras Health Worker Training	1,000
" " "	Ghana Feasibility	2,369
" " "	Kenya Weaning Foods	1,000
" " "	Dr. Henry Borsook Fund	5,000
United Presbyterian Church in the USA	Nutrition Workshop	10,000
" " "	(Nutrition Education (Consumer Outreach	25,000
	Total Churches	$ 157,300
PACT		
Private Agencies Collaborating Together	Korea Comprehensive Rural Nutrition	22,573
" " "	Ecuador Agriculture	50,000
" " "	Ghana Feasibility	2,369
	Total PACT	$ 74,942
	TOTAL	$ 324,852

1978 FOUNDATION AND CHURCH GRANTS AS OF MAY 1, 1978

Foundations	Purpose	Amount
Clayton Fund	TTG	$ 10,000
General Service Foundation	TTG	8,500
Noyes Foundation	Training School	32,000
Scherman Foundation	General	5,000
Skaggs Foundation	IIPFT	25,000
Total Foundations		$ 80,500
Churches		
Disciples of Christ	Bolivia	2,000
Louisville United Against Hunger	Training School	10,000
Trinity United Methodist Church	Training School	600
United Presbyterian Church-USA	NECOP	25,000
United Church Board for World Ministries (UCBWM)	General	3,000
" " "	Honduras	8,000
" " "	Korea	11,100
" " "	Papago Indians	4,250
" " "	Philippines	6,000
Total Churches		$ 69,950
	TOTAL	$ 150,450

Additional detail on the effectiveness of MFM's ability to raise funds from (1) general public, (2) foundations and (3) churches is covered in answer to Question 5 of the "Supplementary Questions." The DPG for calendar year 1977 accounted for 24% of the total income of Meals for Millions. MFM's total income has increased from $470,000 for 1974 to $895,000 for the year 1977. Without the enhanced ability to develop programs made possible under the DPG, this increased financial base would not have been possible.

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SUPPLEMENTARY QUESTIONS

1. Describe the central purpose and type of activities undertaken by the PVO before its relationship through a grant with AID.

Central purpose of MFM was to distribute food (MPF) to developing communities as long term relief, as well as in disaster situations. During the early 1970's, the Foundation moved towards implementing self-help development efforts. In 1974, 50% of program budget was spent for relief and 50% for development. During 1974, MFM provided technical assistance and equipment to the Sam Yang Noodle Co., Seoul, Korea, for establishing a soy milk production system. The initial production rate of 17,000 bottles per day has grown to 60,000 per day. (See 1974 Newsletter, Appendix 22.) A small training program for food technologists was held sporadically.

2. Describe any changes in program priorities and approach after the grant has been in effect for one, two or three years.

Much emphasis has been placed on redefining the program priorities during the DPG period. Informal discussions between Board and staff during the first year of the grant led to formal discussions during the second year. In January 1977, a retreat was held in order to formulate a set of criteria for programs. During the third year, a Directions Committee of the Board, and the staff with the assistance of New TransCentury Foundation, developed a set of broad objectives and operating plans designed

to make MFM a fully operational development agency.

In three years, the focus has changed from one of relief, to development. The development strategy consists of two approaches, Applied Nutrition Programming and the MFM Food and Nutrition Institute. ANP's will be implemented as integrated rural development programs, while the FNI will concentrate on providing technical assistance, training, consulting, and information in food processing, preservation, storage, nutrition education and related food and nutrition areas. The focus of both of these strategies will be to improve the nutrition of the most vulnerable groups in LDC's. The MFM five-year plan (1978-82) outlines the new developmental thrust and strategy in greater detail. (Appendix 21.)

3. How has the grant affected the PVO's internal organizational structure, particularly the relationship of program staff to executive and policy-making leadership and the balance of responsibilities in the organization?

The grant has permitted increasing considerably the size and improving the quality of the program and technical staff. Without the DPG, MFM could not have attracted or retained the calibre of professional staff that it has on board today. The DPG staff now constitutes 90% of headquarters program and technical staff. The Program Director, who is funded under the grant, is responsible for MFM programming and reports to the MFM

SUPPLEMENTARY QUESTIONS (cont'd.)

President. The influence of the DPG staff on executive and Board decisions is therefore significant. While the President and the fund raising, public relations and controller staff are not under the DPG, the organization functions as a team, with a great deal of interplay among program, technical and other executive staff.

4. Has the grant significantly influenced the PVO's communications and relationships with its constituency or membership, with its clients or field staff, counterpart organizations in host countries and other associate groups?

Yes, the grant has made possible an enormous increase in the communications of MFM with other private, governmental, church, development and funding agencies both in the United States and in many Third World countries. The students in the Training School, from more than 20 developing countries, have been a particularly important client group reached under the grant. In addition, through program staff travel, MFM has made important contacts with development agencies in Africa, Asia and Latin America.

Membership in PACT and CODEL has provided important contact with other PVO's in development and joint programming.

MFM's organization of a Nutrition Education Workshop which brought together 28 field nutritionists and others from 11 countries has resulted in further important contacts for future program development.

SUPPLEMENTARY QUESTIONS (cont'd.)

DPG personnel has attended a variety of conferences on development as follows:

- Nutrition Policy, Nairobi, Kenya
- Development and Environment, Mohonk Trust
- Institute of Food Technology, Philadelphia
- Intermediate Technology
- Soy Utilization, Mexico City

Of perhaps greater importance for future program collaboration, has been the outcome of west coast DPG recipients meeting two to three times each year to discuss various aspects of development. Topics in past meetings have included evaluation, program planning and PVO collaboration. MFM is collaborating with Project Concern on a Bolivia project, and with Foundation for Peoples of the South Pacific on Papua, New Guinea.

Lastly, publications during the grant play an important part in broadening MFM's communications. These include:

- A manual on nutrition education, Teaching Nutrition in Developing Countries or The Joys of Eating Dark Green Leaves;
- A handbook for building and using an inexpensive quick-cooking device, the Village Texturizer;
- A monograph on low cost extrusion cooking;
- Alumni Newsletters to participants in MFM's training school;
- Articles in several magazines and journals.

(See Appendices)

In short, the DPG has definitely resulted in a great expansion of MFM's communications with its several constituencies, both in the developing countries and the United States. These constituencies include:

SUPPLEMENTARY QUESTIONS (cont'd.)

- the poorest of the poor in LDC's;
- those working to improve the quality of life of these groups;
- the donors in the United States who wish to assist these groups;
- other PVO's that are collaborating with MFM to provide effective development assistance in which MFM's expertise in food technology and nutrition is needed.

5. Have the PVO's fund raising efforts been improved during the grant period?

One of the objectives of the DPG is to enable private voluntary agencies to develop their staff capacity and program to the point where they can obtain private money to sustain an increased level of program. MFM is achieving this purpose. It has been able to attract a continually larger volume of outside foundation and church support, as well as maintain its direct mail income. It was elevated in 1977 to the top category which "meets NIB standards" by the National Information Bureau which rates non-profit 501(c)(3) agencies that raise funds from the general public. It has succeeded in attracting an impressive list of National Sponsors which include:

Mrs. John Steinbeck, Chairperson
Hon. Jonathan Bingham
Dr. Arnold O. Beckman
Mrs. Helen L. Buttenwieser
Cass Canfield
Robert Coles
James R. Compton
Norman Cousins
Mrs. Oscar Hammerstein, II
Rev. Theodore M. Hesburgh, CSC

SUPPLEMENTARY QUESTIONS (con'd.)

Lucy Lemann
Mrs. John L. Loeb
Bill Mauldin
Hon. George McGovern
Mrs. Edward P. Morgan
Mrs. Edith N. Muma
Mrs. Edgar L. Rossin
Hon. Paul Simon
Benjamin Spock, M. D.

All projects which DPG funded staff has been developing are funded by external foundation and church grants. In addition, Meals for Millions has been successful in attracting several grants that were made for general purposes. (See grants listed in response to Question 23.)

MFM's growth in income has in part been due also to grants from PACT. This diversification of our funding base, coupled with the continued level of direct mail income, has improved our ability to implement programs developed under the DPG.

In short, the Foundation's income has increased from $470,000 for 1974 to $895,000 for the year 1977. This increase has been due largely to the ability of the programming and fund raising staffs to develop nine programs during the DPG period and to submit these proposals to granting agencies. (Training School; Transfer of Technology; Nutrition Education Workshop; Bolivia Health Delivery and Nutrition Project; Honduras Applied Nutrition Project; Korea Comprehensive Model Rural Nutrition Project; Jamaica Food Processing Technology Project; Ecuador Soy Production and Agriculture Project; and

SUPPLEMENTARY QUESTIONS (cont'd.)

Kenya Materi Irrigation Project. Two others, Ghana Weaning Foods and Ecuador Low Cost High Protein Beverage Projects, were terminated.

6. Have particular problems or needs not previously identified impeded expected progress under the grant; conversely, have any unforeseen developments accelerated progress under the grant?

The main problems in implementing the grant have been initial planning for grant implementation, and re-orientation of the Foundation's focus. A comprehensive implementation plan for the grant was never drawn. This lack of initial planning, including the integration within MFM of fund raising, programming and administrative services, slowed down progress at the beginning of the grant period. Also, overambitious goals as to the level of potential achievement has been a problem. The main impediment during the grant has been the time consuming and very difficult process of orienting the original staff and the Board of Trustees to a more appropriate and realistic level of involvement. Development programs take a lot longer to design and implement than do relief programs. Out of the programs proposed in the grant proposal, four have survived, the Korea Nutrition Program, the Ecuador Agriculture Program, the Training School and the Technology Transfer Program. (These programs are elaborated upon in the body of the report.)

SUPPLEMENTARY QUESTIONS (cont'd.)

Since the meeting of the Board of Trustees in October 1977, the staff has been able to move rapidly on programming. At that meeting, a new direction for MFM was approved, after nearly one and one-half years of dialogue. (See Appendix 22)

7. Discuss how the enhanced capability under the grant has been reflected in improved project planning and implementation:

A. What projects presently in operation have been designed by the program and planning staff?

The following projects have been and/or are being designed under the DPG:

- Honduras Applied Nutrition Program
- Bolivia Health Education and Nutrition Improvement
- Korea Comprehensive Rural Nutrition Program, which includes Nutrition Education under an OPG
- Jamaica: a) Intermediate Food Technology
  b) Technical Workshop
- Nutrition Education Workshop
- Technical training of LDC participants
- Transfer of appropriate food technology, including the Village Texturizer
- Re-design of the Ecuador Agriculture Program
- Kenya Matari Irrigation Project.

B. In what ways do those projects differ from previous overseas activities?

The main areas of difference in project planning and implementation for these projects, as opposed to those prior to the DPG, are in the areas of:

SUPPLEMENTARY QUESTIONS (cont'd.)

- host country involvement;
- specific target populations;
- project evaluation;
- project management;
- small enterprise development.

Host country involvement -- Prior to the DPG grant, MFM staff was inexperienced with project development at the field level. This was partly due to the background of the staff, the focus of the Foundation and the lack of funds to travel and negotiate with LDC institutions. (See answer to Question 18 for discussion of improved staff skills.) The programs developed under the DPG are rooted in the local infrastructure and largely run by nationals. This is one of the more significant changes which has taken place under the grant.

Specific target populations -- MFM is striving for nutritional improvement amongst vulnerable groups. In most cases, these groups are children under five, pregnant and lactating women. Prior to the DPG, MFM programming represented (a) diffuse strategies of training

SUPPLEMENTARY QUESTIONS (cont'd.)

at a very high technical level, and (b) development of large-scale commercial enterprises (e.g., Sam Yang producing soy milk at an initial 17,000 bottles per day). Both of these strategies represented a trickle down methodology as opposed to very direct involvement with the low income sectors of LDC's. Currently, we are involved at the village level, and with very defineable target groups, as illustrated in the response to Question 19, "Outputs and Inputs."

Project evaluation -- Each project has a specific set of project impact benchmarks. These benchmarks represent both quantitative and qualitative indicators of project success. Base line information gathered in the target communities serves as a reference point for setting these achievement indicators. Since these indicators represent long range goals of the program, they are monitored at yearly intervals.

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SUPPLEMENTARY QUESTIONS (cont'd.)

Project management -- To achieve the desired project impact, important sub-goals or outputs must be achieved. The project management developed under the DPG, and still being refined, consists of:

a) A Project Objective Outline (POO)-- which is a brief summary of short term objectives e.g., quarterly and yearly;

b) A Project Activity Schedule (PAS) -- which is a month-by-month listing of activities needed to be accomplished in order to achieve goals; and

c) A Project Status Report (PSR) -- which is a report on the status of project objectives, reviewed monthly by the Project Manager and the Program Director.

The POO and PSR are management, control and evaluation tools, while the PAS serves as a planning tool for the Project Manager. This system is constantly being refined to reduce the amount of paper work involved, while at the same time providing for a responsible program management system. (Appendix 23)

Enterprise development -- Prior to the DPG, MFM felt that self-help development projects were development of fairly large food processing businesses or provision of technical assistance to ongoing businesses. MFM still feels that enterprise development is part of an integrated programming approach. However, since the majority of the poor in developing countries are either out of, or only marginally involved in, a

SUPPLEMENTARY QUESTIONS (cont'd.)

money economy, business development must be geared to very simple technologies or services. Some examples are preservation of food at the village level, simple processing of foods to produce low-cost, somewhat more convenient, forms of food for consumers, etc.

This shift of emphasis has taken MFM out of the business environment and brought programs into direct contact with recipients, primarily in the rural areas. (See answer to Questions 18 and 21 for fuller discussion of this shift.)

8. What are your organizational plans for operation after the grant period has terminated?

A five year outline has been prepared for the period 1978-1982. It includes MFM's goal, operational strategies and projected programming thrusts. The organizational structure and staff needed to accomplish the goals is in preparation. These plans include a three-man management team with the addition of a Technical Director to the staff, and improvement in MFM's project cost accounting system.

9. Summarize progress to date and recommendations with regard to the institutional impact of the grant.

Progress under the DPG can be summarized as follows:

A. Organizational change from relief to development focus;

B. Core program development and evaluation staff in place;

C. Increased programming level achieved;

D. Expanding funding base which includes churches, foundations, and in the increase in the size of the donor list.

SUPPLEMENTARY QUESTIONS (cont'd.)

It is recommended that AID provide support to MFM for an additional period of three to four years. This support should include continued funding for program development and evaluation activities, with emphasis on development and implementation of field programs that improve food and nutrition in the rural village and poorer urban communities directly.