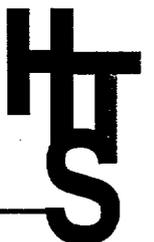


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**Project SUSTAIN Evaluation
Report**
(Project No. 936-5120)

Health Technical Services Project



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PD-ABN-153

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Report**

(Project No. 936-5120)

By:

Robert Pratt, Team Leader
Victor Fulgoni

For:

Division of Nutrition and Maternal Health
Office of Health and Nutrition
Center for Population, Health, and Nutrition
Bureau for Global Programs, Field Support, and Research
U.S. Agency for International Development

May 1996

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Additional copies of the report may be obtained in writing to:
The Health Technical Services Project
1601 North Kent Street, Suite 1104
Arlington, VA 22209
(703) 516-9166
(703) 516-9188 (fax)
or via Internet: hts@htsproject.com

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Preface

The Evaluation of Project SUSTAIN (Project No. 936.5120) was carried out at the request of the Division of Nutrition and Maternal Health, Office of Health and Nutrition, USAID/Washington. The evaluation was conducted during the period March 1996 through May 1996. A two-member team performed its work in the Washington, D.C. area and in two countries where SUSTAIN has had activity: El Salvador and Guatemala.

Evaluation Team Members

Position

Robert Pratt
Independent Consultant
Former USAID Direct Hire

Team Leader

Victor Fulgoni, Ph.D.
Vice President, Nutrition
Kellogg Company

Nutrition and Private Sector
Food Industry Expert

Acknowledgments

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We also wish to thank the Health Technical Services Project for their thorough preparation and support throughout the evaluation process.

Acronyms

AGTA	Guatemalan Association of Food Technologists
ANE	Asia and the Near East Region or Bureau of USAID
BASICS	Basic Support for Institutionalizing Child Survival Project
BHR	Bureau for Humanitarian Response, USAID
BHR/PVC	Bureau for Humanitarian Response, Office of Private and Voluntary Cooperation
CA	Cooperative Agreement
CBI	Cooperative Business International
CDF	Cooperative Development Foundation
CLUSA	Cooperative League of the United States
ENA	El Salvador's National School of Agriculture
FDA	U.S. Food and Drug Administration
G/PHN/HN/NMH	Nutrition and Maternal Health Division, Office of Health and Nutrition, Center for Population, Health and Nutrition, Bureau for Global Programs, Field Support and Research (G is also referred to as the Global Bureau)
Groupment NAAM	Not an acronym; refers to a village group in Burkina Faso which includes people of all ages
HACCP	Hazard Analysis Critical Control Points
IFT	Institute of Food Technologists
INCAP	Institute for Nutrition, Central America and Panama
INTSOY	International Soybean Program
ISO9000	International Organization for Standardization (Several series of standards issued by ISO are grouped as "ISO 9000")
LAC	Latin America/Caribbean Region or Bureau of USAID
LAC/RSD/HPN	Latin America/Caribbean Bureau, Office of Regional Sustainable Development, Health, Population and Nutrition
LDC	Less-developed country
MAP	Micronutrient Assessment Program
NBS	National Bureau of Standards (Uganda)
NCBA	National Cooperative Business Association
OMNI	Opportunities for Micronutrient Interventions Project
PROFRUTA	Guatemalan Ministry of Agriculture Project for Small Fruit Producers
SUSTAIN	Sharing U.S. Technology to Aid in the Improvement of Nutrition
TA	Technical Assistance
TAS	Technical Assessment Systems, Inc.
UCRAPROBEX	El Salvadoran Coffee Cooperative
UMA	Uganda Manufacturers Association
USAID	United States Agency for International Development
USDA/ICD	United States Department of Agriculture/Office of International Cooperation and Development

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Executive Summary

I. OVERVIEW

The Sharing U.S. Technology to Aid in the Improvement of Nutrition (SUSTAIN) Project was established in 1982 by the USAID Office of Nutrition. SUSTAIN was initiated through pilot activities and continued through two successive grants during the period 1983 through 1991. On September 30, 1991, a five-year cooperative agreement (CA) was signed with the National Cooperative Business Association (NCBA) to manage this project. This evaluation of Project SUSTAIN concerns itself with this most recent cooperative agreement, started in Fiscal Year (FY) 1992.

The rationale for the Project is to link the U.S. private sector food industry with counterpart industries in less-developed countries (LDCs). LDCs can draw upon this extensive food industry expertise to improve the nutritional quality, and expand the availability of, processed foods. The Project was designed to support USAID's overall nutrition and health program strategies and objectives.

Core funding for the Project derives from the Food Technology and Enterprise Project (USAID Project No. 936-5120), and is managed by the Office of Health and Nutrition, Bureau for Global Programs, Field Support, and Research.

The Project's objectives have not changed substantively since 1982. The Project's goal is

"to improve the nutritional well-being of the populations of selected developing countries, especially at-risk women and children, by ensuring that there is better quality, safer, and more nutritious foods available at reasonable prices."

The Project purpose is

"... to provide access to the U.S. food processing and marketing industry by small- and medium-sized food processing companies, host government officials, and USAIDs in targeted developing countries. The industry volunteers will share their technical expertise and experience with developing countries to improve local food processing, preservation, safety, marketing, and management skills and procedures. Special emphasis will be placed on the enrichment of local foods and the development or improvement of weaning foods."

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These objectives were to be achieved during a five-year period (Fiscal Years' 1992 - 1996) through a series of *Overseas Activities* (12 Assessment Missions, 27 Technical Consultations, and 21 Training Workshops) and *Publications* (preparation and distribution of *SUSTAIN Notes* on a quarterly basis; Activity Reports upon completion of the overseas activities; and quarterly and annual progress reports). In addition, NCBA/SUSTAIN offered to respond to written requests for technical information from persons in LDCs, an activity not envisioned in the Cooperative Agreement, but agreed upon by USAID.

The purpose of this evaluation is to assess the performance and effectiveness of the SUSTAIN Project in carrying out its activities during the period October 1991 through March 1996. The findings will assist USAID in assessing the value of the SUSTAIN program and in determining if its scope should be expanded. Evaluation findings are also expected to assist SUSTAIN in planning for its future. The evaluation was performed by a two-member team during the period, March through May 1996.

II. PERFORMANCE

The NCBA/SUSTAIN Project team has met or exceeded all of the objectives outlined in the Cooperative Agreement, with one exception: "... impacting especially on at-risk women and children." It is not realistic to expect a program of short-term volunteer technical assistance to mostly for-profit food companies, to impact in the near term, either directly or indirectly, on nutritional status of at-risk women and children. In the long run, however, expanded availability of safer and improved processed food products, resulting in part from SUSTAIN volunteers' contributions, could be expected to benefit at-risk population groups.

SUSTAIN has successfully provided access for many LDC small- and medium-scale food processing companies to U.S. food industry experience and expertise, as called for in the Cooperative Agreement. The evidence confirms that the volunteers have effectively transferred knowledge and practical implementation skills on food processing, preservation, and marketing.

A. MANAGEMENT

The NCBA/SUSTAIN team has managed the Project extremely well: efficiently and effectively. A large amount of excellent work has been accomplished by a very small staff on a modest USAID core budget of approximately \$400,000 per year. This has been possible by careful financial planning and the provision of almost all technical services by industry volunteers. The staff has been greatly assisted in planning, volunteer recruitment, and marketing, by its volunteer Steering Committee members. The value of non-USAID contributions toward the Project, including volunteers' in-kind services, in-country contributions from the Project's

beneficiaries, and some other U.S. contributions, have already exceeded the amount estimated in the Cooperative Agreement and exceeds the USAID total contribution of nearly \$2.0 million.

The staff has established and maintained excellent, productive relationships with their USAID and LDC clients and with the volunteers and industry groups. This has contributed greatly to the number of requests for SUSTAIN services in the face of great odds: the SUSTAIN Project is not in the mainstream of USAID priorities around the world. SUSTAIN's success is due in large part to active marketing of its services and to delivering high-quality products. Promotion through the NCBA/Cooperative League of the United States (CLUSA) network generated the country programs in Burkina Faso, El Salvador, and Indonesia.

B. TECHNICAL SERVICES

The technical contents of SUSTAIN's activities has remained constant throughout the period under review. The technical focus has remained on quality control, food safety, waste handling, processing and preservation methods, packaging, and marketing. But the components' mix, i.e., Assessment Missions, Technical Consultations, and Workshops, has evolved differently from that projected at the outset. SUSTAIN has conducted relatively more workshops at the expense primarily of the one-on-one technical assistance consultations. SUSTAIN and USAID decided that workshops are more cost effective because 20 to 30 persons and firms can benefit from one workshop, whereas usually just one enterprise benefits from the consultation missions.

Feedback about the volunteers' performance from beneficiaries and others familiar with their work is extremely positive with regard to the quality and relevance of the information provided, the didactic methods used, and the strong commitment shown by volunteers in helping their third world professional colleagues. The SUSTAIN staff also receive high marks from their LDC counterpart organizations for their role in planning, arranging, and supporting the missions.

SUSTAIN Notes has been well received overseas because of its interesting feature articles, which are sometimes translated and reprinted in local publications for broader distribution.

III. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

1. Project SUSTAIN has been implemented extremely well. The NCBA/SUSTAIN team has achieved the purpose and outputs set forth in the Cooperative Agreement. They have met those objectives to the complete satisfaction of the beneficiaries and USAID

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missions, with one exception: the special emphases on at-risk women and children and on enrichment of local and weaning foods were not realized.

2. Impact information is only anecdotal. SUSTAIN has not yet made a systematic effort to obtain concrete impact information, and USAID has not asked it to do so.
3. SUSTAIN's product appears to be peripheral to USAID's current priority concerns. Few, if any, USAID missions have been willing to provide their own bilateral program funds to support SUSTAIN's work in their countries. All missions in countries where SUSTAIN has worked, have been very pleased with its performance, but are not prepared to finance its work.
4. SUSTAIN has performed a series of excellent short-term overseas missions in many countries, with a number of repeat, or follow-up, missions to some places. But, in Central America at least, there is a strong desire for SUSTAIN to plan and carry out a long-term program focused on a few priority subjects to achieve some concrete, measurable food industry strengthening objectives. SUSTAIN shares this desire. In order to do so, SUSTAIN would require an assured, adequate source of long-term funds, a resident SUSTAIN representative in each country or region of emphasis, and reasonable assurance of the availability of appropriate volunteers as needed.
5. SUSTAIN is at a critical juncture. It has proven its value as a provider of effective short-term food technology expertise on behalf of USAID. Now it has the opportunity to become an independent PVO with diversified funding sources, providing longer-term services intended to achieve sector wide changes in selected countries. This poses a question of whether it can do so while continuing to rely on volunteers and without an assured long-term commitment of funds.

B. MAJOR RECOMMENDATIONS

1. SUSTAIN should continue to seek and carry out short-term missions as requested by USAID missions and other groups.
2. SUSTAIN should make a major effort to determine the results and impacts from its services.
3. SUSTAIN should pursue its efforts to develop long-term programs in a few selected countries and regions, especially in Central America.

4. USAID should determine its interest in SUSTAIN as a resource to the Agency's health and nutrition, economic growth, private sector and enterprise development, and food and agriculture strategies, and if positive, create a funding and management mechanism to support its work.
5. SUSTAIN should make a major effort to obtain financial support from private sources to serve as matching contributions to USAID funds and as a way of expanding its relationships with U.S. industry and philanthropic groups.

I. Introduction and Overview

A. PROJECT DESCRIPTION

The Sharing U.S. Technology to Aid in the Improvement of Nutrition (**SUSTAIN**) Project was established in 1982 by the USAID Office of Nutrition. SUSTAIN was initiated through pilot activities and continued through two successive grants during the period 1983 through 1991. On September 30, 1991, a five-year cooperative agreement (CA) was signed with the National Cooperative Business Association (NCBA) to manage this project. This evaluation of Project SUSTAIN concerns itself with this most recent cooperative agreement, started in Fiscal Year (FY) 1992.

The **rationale for the Project** is to link the U.S. private sector food industry with counterpart industries in less-developed countries (LDCs). LDCs can draw upon this extensive U.S. food industry expertise to improve the nutritional quality, and expand the availability of, their processed foods. The Project was designed in support of USAID's overall nutrition and health program strategies and objectives.

Core funds for Project SUSTAIN derive from the Food Technology and Enterprise Project (USAID Project No. 936-5120). Management is provided by the Office of Health and Nutrition within the Bureau for Global Programs, Field Support, and Research (G/PHN/HN; G is also referred to as the Global Bureau).

The Project goal and purpose have not changed substantively since 1982. The current Cooperative Agreement states the following:

The **goal** is

"to improve the nutritional well-being of the populations of selected developing countries, especially at-risk women and children, by ensuring that there is better quality, safer, and more nutritious foods available at reasonable prices."

The Project **purpose** is

". . . to provide access to the U.S. food processing and marketing industry by small- and medium-sized food processing companies, host government officials,

and USAIDs in targeted developing countries. The industry volunteers will share their technical expertise and experience with developing countries to improve local food processing, preservation, safety, marketing, and management skills and procedures. Special emphasis will be placed on the enrichment of local foods and the development or improvement of weaning foods."

The principal **outputs** expected from the Project are

". . . to transfer knowledge and practical implementation skills on food processing, preservation, management, and marketing through SUSTAIN visits, in-country training, visits to the United States, and written communication."

The Cooperative Agreement cautions that, due to the short-term nature of the services and reliance on volunteers to provide these services, this Project alone will not ensure that the knowledge imparted will be applied and recommendations implemented. It states that SUSTAIN's previous experience revealed that additional follow-on services from USAID, local, private sector, or others will be required to achieve long-term results. It explains that

"SUSTAIN can act as a catalyst to begin the process of improving skills and expertise of food processing industries. It can also emphasize the value of commercially viable food industries' increasing income as a way to improve the nutritional status of the targeted populations."

But the USAID authors of the Cooperative Agreement clearly acknowledge that SUSTAIN could not alone be expected to achieve such long-term impacts.

B. PROJECT COMPONENTS

According to the Cooperative Agreement Program Description, SUSTAIN is to carry out **two types of activities: Overseas Activities and Publications.**

1. Overseas Activities

The **Overseas Activities include Assessment Missions, Technical Consultations, and Workshops.** The number of overseas activities expected in the Cooperative Agreement is 12, 27 and 21 respectively.

The Assessment Missions are intended to: 1) assess strengths and weaknesses of food processing industries in selected countries; 2) evaluate problems and concerns expressed by the private sector, public sector, and USAID mission; 3) propose recommendations to address these

concerns; and 4) outline a plan of action for short- and long-term follow-up activities. The assessment mission teams are usually to include two volunteer food industry experts and a SUSTAIN staff member. Following each mission, SUSTAIN prepares a report of their findings and recommendations with dissemination to USAID, the Steering Committee, and the team members.

Following the assessment mission, SUSTAIN is expected to follow up with **Technical Consultations** by sending one or two technical consultants to help solve specialized problems confronting small- to medium-scale food processing firms and organizations. Most consultants are volunteers, but it is anticipated that paid consultants will occasionally be required. If the requests for these consultations require long-term assistance beyond the funding and volunteer capacity of SUSTAIN, SUSTAIN can decline to accept them on the premise that other programs are more suited to handle this longer-term assistance. At the completion of each technical consultation visit, consultants prepare a report outlining their findings and recommendations. SUSTAIN sends these reports to the participants, USAID, and the Steering Committee.

Technical issues identified by the Assessment Missions and Technical Consultations are expected to serve as subjects for industry-wide **Workshops** and seminars. They are to be co-hosted by in-country organizations, with SUSTAIN providing the technical consultants (volunteers) to conduct the training. Topics are expected to include food processing and preservation techniques, packaging and labeling, quality control, waste management, food safety, and marketing. The consultant and SUSTAIN prepare summary reports of the workshops and disseminate them accordingly.

2. Publications

The **Publications component** is to include the following activities or documents:

- **SUSTAIN Notes**: to be published quarterly and distributed to approximately 1,400 persons and organizations. It is to contain articles about technical food processing issues, contributed by professionals from U.S. food industries, universities, international organizations, and host-country groups.
- **Activity Reports**: to be prepared and disseminated upon completion of overseas activities, described above.
- **Quarterly Activity and Annual Reports**: to be submitted quarterly and annually. Quarterly Activity Reports are to summarize project activities, budget expenditures, and plans for the balance of each year. Annual reports are to summarize all project activities for the year, and provide detailed descriptions of the Assessment Missions and Technical Consultations. Reports are to be distributed to USAID and the Steering Committee.

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- Mailing List: to be updated regularly and maintained (the mailing list currently contains 1,400 persons and organizations).
- Written Technical Assistance Requests: SUSTAIN responds to requests from companies and others in LDCs for technical information related to food processing. NCBA/SUSTAIN offered to provide this additional U.S.-based service to USAID in its proposal, although this service was not requested by USAID. The proposal was accepted by USAID and has become a regular feature of SUSTAIN's program.

C. EVALUATION OBJECTIVES AND METHODOLOGY

USAID's purpose for this evaluation is to assess the design, implementation, performance, achievements, effectiveness, and impacts of SUSTAIN during the period October 1991 through March 1996. The key criteria for examining the Project concept and performance are relevancy, effectiveness, and unintended results, as well as direct and indirect impacts of project activities. The evaluation is more specifically intended to:

- Provide a general assessment of SUSTAIN's performance and program impact;
- Assist USAID in determining what (if any) program adjustments are warranted in anticipation of a follow-on cooperative agreement;
- Propose a set of performance indicators for the assessment of future activities, and how these might be measured;
- Identify information and other data that would be useful for future evaluations;
- Assess the impact of the program in areas outside of its current focus and make recommendations on the extent to which SUSTAIN's program scope may be expanded into these areas;
- Identify "lessons learned" for consideration by SUSTAIN in its future program planning and implementation;
- Evaluate whether SUSTAIN's objectives fit into USAID's overall strategic objectives and priorities.

The Evaluation Team was asked to keep in mind that USAID intended for the Project's structure and implementation to be flexible, to allow SUSTAIN to respond to new opportunities and changing circumstances.

The Evaluation was performed during the period March through May 1996 by a two-member team. The Team used a USAID-prepared Scope of Work to guide its analysis (Annex A). It used the following methods to conduct the evaluation:

- Team Planning Meeting;
- Interviews with USAID and SUSTAIN staff in Washington, D.C.;
- Interviews with SUSTAIN volunteers and Steering Committee members by telephone;
- Review of:
 - all project quarterly and annual progress reports
 - approximately one-third of all mission trip reports
 - all issues of *SUSTAIN Notes*
 - correspondence from project beneficiaries and in-country collaborators
 - other documents relating to project activities;
- Field site visits to Guatemala and El Salvador, with interviews of beneficiaries, collaborating institutions, and USAID staff.

(See also Annex B for a list of individuals interviewed.)

D. CURRENT PROJECT STATUS

1. Overseas Activities Component: Missions Performed

Project SUSTAIN will exceed the Cooperative Agreement target of 60 missions performed. Sixty-two (62) were completed by April of 1996 and another two missions are projected for the remainder of this fiscal year. The substantive content of the missions has remained as described above, but the mission mix differs from that anticipated at the outset, especially during the past two years (Table 1). (See Annex C for a list of all SUSTAIN activities.)

Table 1: Actual Vs. Anticipated Number of Overseas Activities

Category of Activities	Anticipated Number	Actual Number
Assessment Missions	12	20
Technical Consultations	27	11
Workshops	21	31
TOTAL	60	62

Upon USAID's request, SUSTAIN staff and volunteers have also assisted individuals from LDCs to visit U.S. companies, and to attend technical meetings and briefings, including the annual meeting of the Institute of Food Technologists (IFT). Although not counted as missions performed, they represent important contributions by SUSTAIN (also see II.B.2.e., pg. 30).

Technical missions have been distributed over the first four and one-half years of the Project as follows (Table 2):

Table 2: Distribution of Overseas Activities by Fiscal Year

Fiscal Year	Number of Activities
Fiscal Year 1992	12
Fiscal Year 1993	15
Fiscal Year 1994	16
Fiscal Year 1995	13
Fiscal Year 1996 Completed	6
Fiscal Year 1996 Projected	2
TOTAL	64

Missions have been heavily concentrated in Central America (Table 3: Distribution of Overseas Activities by Region). This concentration has resulted from: relatively strong interest on the part of Central American food industries; their technological readiness to benefit from SUSTAIN's volunteers; strong support from the USAID regional office in Guatemala; active participation of INCAP and AGTA (Guatemalan Association of Food Technologists); proximity to the U.S., making it relatively inexpensive for SUSTAIN, and easy for busy volunteers to travel there; and a felt need by the Central American food industry to upgrade their products and improve their competitiveness to meet the demands of regional and global trade.

Table 3: Distribution of Overseas Activities by Region

REGION	NUMBER OF ACTIVITIES
Latin America and the Caribbean (LAC)	
Barbados	1
Belize	1
El Salvador	6
Guatemala	25
Honduras	4
Mexico	1
TOTAL LAC	38
Africa	
Burkina Faso	3
Cameroon	1
Nigeria	1
Uganda	3
Zambia	1
TOTAL AFRICA	9
Asia	
India	1
Indonesia	3
Nepal	2
Philippines	2
South Pacific	1
TOTAL ASIA	9
Eastern Europe/NIS	
Hungary	2
Russia	4
TOTAL EASTERN EUROPE/NIS	6
GRAND TOTAL	62

2. Publications Component

a. Written Technical Assistance Requests

Although not included as a SUSTAIN responsibility in the Cooperative Agreement, SUSTAIN staff members have devoted considerable time and effort to responding to written requests for advice and informational materials on technical matters related to food processing. Most requests have been stimulated by SUSTAIN missions. Others have resulted from advertisements in *SUSTAIN Notes* and other materials, where readers have been invited to request information about technical problems encountered. Table 4 shows the number of written requests received by fiscal year.

Table 4: Written Technical Assistance Requests by Fiscal Year

Fiscal Year	Number of Requests
Fiscal Year 1992*	62
Fiscal Year 1993	38
Fiscal Year 1994	30
Fiscal Year 1995	12
Fiscal Year 1996	4
TOTAL	146

*A portion of these requests were from prior years.

As noted in Table 4, a substantial reduction in requests in the last two years is the result of a decision by SUSTAIN (with USAID agreement) to stop advertising the service in its publications. This decision resulted from the amount of time and effort staff members were devoting to answering the technical assistance requests, coupled with a judgment that the benefits are probably low, and certainly not measurable. According to SUSTAIN, most requests are too imprecise to permit concrete responses targeted directly toward solving real problems. This is in contrast to the advice that volunteers can provide on-the-ground during site visits to factories. Therefore, driven by concern for conserving scarce project funds and maximizing returns, SUSTAIN has decided to minimize this activity.

b. *SUSTAIN Notes*

The Cooperative Agreement calls for SUSTAIN to publish *SUSTAIN Notes* quarterly and distribute it to approximately 1,400 persons and organizations in LDCs and the U.S. *SUSTAIN Notes* publishes technical matters relevant to LDC food industries. It is SUSTAIN's

basic informational mechanism. Contents are conceived by SUSTAIN's staff and Steering Committee, and are occasionally suggested by USAID staff. Articles are contributed by experts from U.S. food industry (often SUSTAIN volunteers), university faculty, international organizations, and LDCs. *SUSTAIN Notes* has generated interest among LDC food industry groups in obtaining SUSTAIN technical services and has also generated many of the technical assistance requests for materials, as mentioned above.

Since October 1991, Project SUSTAIN has published only eight issues of the 18 issues anticipated (Table 5).

Table 5: Actual vs. Anticipated Number of SUSTAIN Notes by Year

Year	Anticipated Number	Actual Number
1992	4	2
1993	4	3
1994	4	2
1995	4	1
1996	2	0
TOTAL	18	8

The first six *Notes* are four pages long, and the last two, six pages. The earlier editions contain only a feature article, while the last two contain additional information about SUSTAIN's activities. An edition was planned for last year featuring an article on marketing, but it was deferred due to funding and staffing constraints. The USAID Project Officer has suggested that the next edition feature iodine fortification. Contents of *Notes* are listed in Table 6.

Table 6: Contents of SUSTAIN Notes

Notes No.	Volume, Date	Title
Notes 1	Vol.4-2, March-April, 1992	Issues in Microbiological Food Safety
Notes 2	Vol.4-3, June-July 1992	Focus on Food Labels
Notes 3	Vol.4-4	Organic Foods—Market Trends and Definition
Notes 4	Vol.5-1	Edible Packaging

<i>Notes 5</i>	Vol.5-2	New Product Development: The Lifeblood of Most Food Companies
<i>Notes 6</i>	Vol.5-3	A Primer on Cooking Extruders
<i>Notes 7</i>	Vol.6-1	The Food Industry's Role in Water Supply Management
<i>Notes 8</i>	Vol.7-1	HACCP*: A Design for Food Safety

*Hazard Analysis Critical Control Points

3. Staffing

As of April 1996, SUSTAIN has five full-time staff members, one half-time scientist, and two part-time interns. Food science graduate students are used as needed for literature research and to fulfill technical assistance information requests. (Staff and positions are included in Annex D).

SUSTAIN has supplemented its small staff through extensive use of summer interns, part-time employees, off-site graduate students, consultants, and a subcontractor for research, communications, and clerical support. The subcontractor has worked part-time with the Project for several years, assisting with communications and proposal writing. SUSTAIN does not have staff or representatives located in countries in which it works. It feels this absence impedes its ability to identify, plan, and implement activities. SUSTAIN has requested additional USAID funds for this purpose.

While the staff is quite small, it is larger now than during the period 1994/1995, following the departure of the Technical Manager. During this interim period, the Executive Director and Administrative Associate were virtually alone until the Program Development Manager was hired in 1995. However, since two of the current staff members are devoted exclusively to the new USAID/Bureau for Humanitarian Response (USAID/BHR), Micronutrients Assessment Program (MAP) cooperative agreement, there are only four full-time staff members responsible for all of the regular SUSTAIN program activities.

4. Volunteers

SUSTAIN currently draws upon a network of approximately 200 volunteers to deliver its technical assistance. These volunteers are senior-level food industry executives and scientists. Most of the volunteers are currently employed, but some of the more active ones are retired. Volunteers usually begin serving while still employed and then continue their association with SUSTAIN into retirement. Of the total number of volunteers, 50 have served on 62 overseas missions. Some have served only as Steering Committee members or helped with specific U.S.-

based tasks. Volunteers represent a wide range of skill areas, companies, and regions of the country. A list of these companies and their technical specialities is included in Annex E.

5. Financial Status

SUSTAIN is approaching the end date of its current Cooperative Agreement on September 29th of this year. To date, it has received \$1,999,996, the full amount of its total funding. Of this amount, \$1,670,000 has represented "core" funds from G/PHN/HN, with the remaining \$329,996 in "field support" funds (\$140,000, Guatemala and Central American Programs; \$15,000, Nepal; \$174,996, LAC/RSD/HPN). Through FY '95, SUSTAIN had expended \$1,407,610, or 70% of its total budget in 80% of the project period. Documentation has been submitted to the USAID Procurement Office for an extension of the CA through September 30, 1998. The CA ceiling is to be increased by \$2,000,000.

In March 1993, USAID authorized a \$2.0 million "add-on" capability, above and beyond the nearly 2.0 million in core funds. Add-ons have been minimal however. SUSTAIN did receive \$118,000 from the Asia Bureau in 1994 via a grant from the U.S. Department of Agriculture/Office of International Cooperation and Development (USDA/ICD). The LAC/RSD Office tentatively intends to provide \$80,000 in April of this year as the first tranche of a total \$200,000 add-on. These funds are to come from their Hemispheric Free Trade Expansion Project and to be used by SUSTAIN to provide technical assistance and training in quality assurance systems, food processing, and technical and marketing practices to small- and medium-scale food industries in the LAC region. NCBA/SUSTAIN also entered into a new cooperative agreement with USAID/BHR in 1995 for the Micronutrient Assessment Program (\$500,000).

SUSTAIN claims that approximately \$2.0 million worth of non-USAID-funded services will have been contributed to the Project by the volunteers (in-kind), by the "clients" overseas (in-kind and cash), or as grants by U.S. corporations and foundations. This will substantially exceed the \$1,653,378 that NCBA/SUSTAIN was expected to contribute as the "non-Federal" matching portion of the total estimated budget of \$3,653,374. By the end of FY '95, that contribution had already reached \$1,713,387 and by March of 1996, 1.9 million.

The Project went through a difficult period in 1994 when USAID's incremental funding was held up and there existed the real possibility that no funds would be forthcoming that year. On the advice of the newly-assigned USAID Project Officer, SUSTAIN cut back on a number of activities, including deferring publication of *SUSTAIN Notes*, rejecting some overseas mission requests, and minimizing responses to written requests for technical assistance. Fortunately, the funds were provided that year. Fiscal Year 1995 funds were also provided and the FY '96 funds are in process.

6. Institutional Status

SUSTAIN is currently in transition, from being a project of the National Cooperative Business Association funded solely by USAID, to becoming incorporated as an independent, not-for-profit "501(c)(3)" entity. While the incorporation process is very complex and is taking considerable time and energy of some staff and Steering Committee members, SUSTAIN has fortunately succeeded in obtaining legal services, to assist with the incorporation, from a prominent law firm on a pro bono basis. This change in status has been strongly encouraged by USAID, which sees it as a means of continuing and expanding the program beyond what USAID alone can support. Given USAID's recent budgetary constraints and policy and institutional changes and uncertainties, the Office of Health and Nutrition has also urged SUSTAIN to diversify its sources of funding (see below).

7. New and Proposed Sources of Funds

As part of SUSTAIN's initiative to become an independent organization with diverse funding sources, some staff and a fund raising working group of key Steering Committee members, have begun to develop a strategy for soliciting financial support from private corporations and foundations. They were successful last year, for instance, in obtaining \$15,000 from the Heinz Foundation and \$5,000 from Nabisco for office computers, and \$13,000 from the Cooperative Development Foundation (CDF) to assist private cooperatives in LDCs. In addition, over the years, SUSTAIN has received funds from Gorton's, Hershey, Technical Assessment Systems, Inc. (TAS), Silliker Laboratories Group, Inc., McCormick, and Cooperative Business International (CBI) to support meeting and reception costs for volunteers at the IFT annual meetings.

As noted above, SUSTAIN has been successful in diversifying its sources of funding beyond that provided by the Office of Health and Nutrition in the original Cooperative Agreement. Last year it received \$500,000 from the USAID Bureau for Humanitarian Response to analyze the quality control and the stability of vitamins added to fortified commodities used in USAID food aid programs. This new Micronutrient Assessment Program Cooperative Agreement has allowed SUSTAIN to hire two scientists to carry out the work, in collaboration with the food companies supplying the commodities, and various specialists from industry, government, and academia.

SUSTAIN has also succeeded in obtaining funds from USAID's Bureaus for Asia and the Near East (ANE) and for Latin America and the Caribbean (LAC), and has made proposals to the El Salvador, Uganda, and Eritrea Missions and to the LAC Bureau for funding food industry strengthening programs in those countries/regions. Given the current unfavorable financial state of USAID worldwide, however, SUSTAIN's chances of obtaining funds from these sources are probably not very good. SUSTAIN staff members have had discussions with the Inter American

Development Bank for work in Latin America, but have not yet applied for funding. They have also submitted a proposal to USAID/BHR/PVC for work in Africa.

SUSTAIN's long-term growth, or even survival, will depend heavily on its ability to obtain financial support from private sector sources. To the extent that it can do so, it will be in a strong position to leverage scarce funds from USAID on a matching basis, a concept that may become increasingly attractive to, and used by, USAID in the future.

8. Project Facilities

The Project recently moved out of the NCBA headquarters, where it had been located since 1990, to space in the National Wildlife Federation building in Washington. The offices are attractive and adequate for SUSTAIN's present size and needs. They have recently been able to upgrade their computer and other office equipment by a generous donation from the Heinz Foundation and Nabisco (mentioned above). This has enabled the Project to communicate with its volunteers and overseas counterparts via E-mail, modernize its record keeping and data base files, share files through an internal network, and prepare desk top published documents.

II. Project Analysis

A. PROJECT CONCEPT, DESIGN AND PRIORITIES

1. Appropriateness of Cooperative Agreement Goal, Purpose, Outputs, and Objectives

The Project concept and overall objectives have proved to be sound, with one exception. The goal of impacting "especially" on at-risk women and children is overly ambitious. SUSTAIN's focus on improving the availability, quality, and safety of processed food products in local markets can contribute directly to improving the nutritional well-being of those who can afford to consume these products in LDCs. Only indirectly and in the much longer-term can they benefit those who cannot now afford processed food products. As improved and expanded processing makes more products available to more families at lower prices, through improved practices and reduced post-harvest food losses, it may be possible to benefit the nutritionally at-risk.

SUSTAIN's experience has clearly verified the basic design concept of the Project as expressed in the purpose and outputs. SUSTAIN has successfully provided access for many LDC small- and medium-scale food processing companies to U.S. food industry experience and expertise through the volunteer services of many U.S. food industry experts. The evidence confirms that the volunteers have effectively transferred knowledge and practical implementation skills on food processing, preservation, and marketing.

As noted above, the Cooperative Agreement includes an interesting acknowledgment of the limited capability of this Project to make substantial, long-term impacts on countries' food industries and their populations' nutritional status. It says

"Due to the short term and volunteer nature of the technical assistance, other activities by A.I.D. or the private sector will have to follow SUSTAIN's work to achieve long-term results. The experience of SUSTAIN in 1990/1991 indicated the need for long-term follow-up assistance in order to assure that recommendations were implemented. SUSTAIN can act as a catalyst to begin the process of improving skills and expertise of food processing industries."

This could be taken to mean that SUSTAIN need not be concerned about achieving long-term results by its own efforts and that USAID expects to take responsibility for providing or arranging follow-on services in each country. This has not happened, however, nor could USAID's Global Bureau really make such a commitment on behalf of the USAID missions throughout the world. The chances that USAID would provide strong follow-on support to SUSTAIN's short-term contributions are especially poor given the fact that the SUSTAIN program has not been an integral part of a larger coordinated agribusiness, food processing strategy, and program of USAID; one does not exist. To the contrary, SUSTAIN has been a stand alone effort, contributing to nutritional improvement through small-scale, short-term technical volunteer efforts. USAID's concept and strategy for SUSTAIN have not included means or funds to ensure attainment of long-term results. This lack of concern (until recently) for long-term results may explain why SUSTAIN has not had a systematic method in place for determining the results and impacts of its services (see discussion in II.C., pgs. 33-34).

2. Current Strategy and Priorities

SUSTAIN staff and the Steering Committee are well aware of the Project's relative inability to ensure long-term follow through, by itself or by others. It gives priority to sending missions to countries where the USAID mission wants SUSTAIN's services in support of some ongoing program of its own, thereby increasing the chances for funding and other support to augment and continue the contributions made by SUSTAIN. In this way, SUSTAIN can play the catalytic role anticipated by USAID.

Examples of SUSTAIN's success as a catalyst include:

- El Salvador organic coffee project, where after SUSTAIN input, the coffee business now receives long-term support from the USAID-funded CLUSA program.
- Burkina Faso potato storage project, where SUSTAIN's contributions were part of a larger ongoing USAID program.

In this latter example, SUSTAIN's ability to follow through was frustrated first by its own lack of funds, and then by the pull out of USAID from Burkina Faso.

More often however, SUSTAIN has not been able to provide or arrange for long-term support. In recognition of this, its current proposals for work in Latin America and Africa emphasize longer-term, programmatic services focused on certain concrete results.

Demand has continued to be strong for the same subject areas identified in the Cooperative Agreement: food safety; quality control; good manufacturing practices; and marketing. While weaning foods was also mentioned as an area for emphasis in the CA, there has only been one

mission interested, and only two projects have dealt with nutritionally-rich products for children (in Guatemala). A new topic, fortification, for which SUSTAIN received field support funding from the LAC Bureau and a separate cooperative agreement from the BHR Bureau, fits well within SUSTAIN's mandate and could provide considerable demand for services, especially in Latin America.

B. IMPLEMENTATION PERFORMANCE

1. Management

a. Financial

SUSTAIN has operated efficiently on a modest budget. Expenditures have been kept well within the amounts provided by USAID (see Section I.D.5, pg. 11 for more discussion). SUSTAIN has managed its budget well, and generally in line with the original estimated budget, with some exceptions. In four years it had already expended 90% of the salaries and fringe line items, but had spent substantially less than anticipated for consultants (30%), travel and per diem (50%), and subcontracts (63%). This is evidence that SUSTAIN has been more successful than expected in recruiting volunteers for missions in lieu of relying on paid consultants. The shortfall in travel funds expended may be explained by the heavy concentration of missions in Central America (about 61% of total missions).

During FY's '92 through March of FY '96, SUSTAIN sponsored 62 overseas missions and its total expenditures of USAID funds were approximately \$1.58 million, resulting in an average total cost per mission of \$25,000+¹. The missions averaged almost two persons each and typically were one week in length. Therefore, SUSTAIN's services cost approximately \$12,000+ per person week, or approximately \$2,000 per person day. Although the Evaluators are not familiar with comparable USAID project costs per day of services, we suspect that this compares very favorably with other technical services projects. However, this represents only the costs of planning, negotiating, and administering the provision of the expertise (plus all other headquarters functions), and not the value of the expertise itself because that has been contributed free-of-charge. When that value is added (\$1.9 million for the same period), more than doubling the total "expended," the total "cost" is seen more clearly and the value of the volunteers' contributions (\$2,500 per person/day) can be appreciated. By adding the volunteer contributions to SUSTAIN's services, the per person day cost rises to \$4,500.

¹This calculation does not recognize SUSTAIN's U.S.-based outputs such as participant training, symposia, and other special events, *SUSTAIN Notes*, etc. If the cost of these U.S.-based outputs are accounted for in the total number of activities, the per mission (or activity) cost is reduced.

This amount is distorted, however, for the following reason. SUSTAIN asks each volunteer to value his or her in-kind contribution by specifying a fair per-day value based on income and fringe benefits received from his or her employer. In making the total in-kind contribution calculations, cited above, it adds the same 40 percent overhead and 4 percent G&A rates applied by NCBA to compare the non-federal (non-USAID) contributions with the USAID contributions, as done by USAID in the CA's estimated budget. But, whether their contributions for that period are valued at \$1.9 million or \$1.37², is immaterial; it represents a major contribution from individuals in the U.S. private sector food industry to USAID's development efforts.

- **Conclusion:** The SUSTAIN staff has successfully stretched their modest budget through creative means. The Project has obtained extensive and valuable free technical and planning assistance from many of its volunteer Steering Committee members; it has made extensive use of university students as part-time interns; it has arranged to receive pro bono legal services for its incorporation process; and it received funds for new office computers as grants from the Heinz Foundation and Nabisco. Taken together, these free or low cost services have enabled SUSTAIN to direct more of its scarce budget toward supporting overseas missions.

b. Staffing

As measured objectively from the quantity and quality of work performed since October 1991, and by SUSTAIN's excellent reputation, the small staff has done an outstanding job. This assessment is supported by the extremely positive comments the evaluators received from volunteers, including Steering Committee members, USAID officers, and clients served in developing countries. The Executive Director is reported to be very effective in analyzing mission requests and defining appropriate terms of reference for volunteers' services; in maintaining excellent relationships with volunteers, donors, and clients; and in raising SUSTAIN's image with USAID, the business community, and Congress. According to volunteers, the Administrative Associate has done a superb job of making travel and other arrangements for their missions and for Steering Committee meetings.

Not one of the volunteers interviewed could cite any problems in their dealings with SUSTAIN, beyond the normal occasional and unavoidable frustrations of planning and implementing overseas missions. They reported that staff members were efficient, courteous, cognizant of their time constraints, and appreciative of their contributions. The Team received the same response from the Guatemalan and El Salvadoran counterparts with whom SUSTAIN has worked, as well as from the USAID staff members in those countries.

²The \$1.37 million is the non-federal in-kind for FY '92 through March FY '96, less NCBA G&A and overhead. The NCBA G&A and overhead for this same period is \$530,000.

The Administrative Associate's performance in the preparation and distribution of mission reports, progress reports, and Steering Committee minutes, has also been excellent, based on the evaluators' review of these documents. In view of her numerous duties and responsibilities, it is remarkable that she has performed each one so well.

The Program Development Manager has also made an invaluable contribution during this past year of major transition for SUSTAIN. She has contributed substantially to the successful move to new office quarters, the acquisition and installation of a new computer network, the upgrading of several office systems, and the numerous administrative requirements of converting SUSTAIN from an NCBA project to independent legal status.

The new Food Technology Programs Manager brings good technical competence to the group, as well as Spanish language capability, which is very important given SUSTAIN's heavy concentration in Central America. This was amply demonstrated to the evaluator when this staff member accompanied him to Central America: he immediately established excellent rapport with the clients, facilitated not only by being a native Spanish speaker, but also by his excellent professional and personal qualifications and demeanor.

The addition of the Director and Deputy Program Manager of the BHR Micronutrient Assessment Program give SUSTAIN invaluable in-house strength in food fortification, which appears to be gaining prominence in SUSTAIN's overall program. The Director's many years of food fortification experience in industry, including experience with the PL 480 program, provides SUSTAIN with important scientific leadership and business and government credibility. The Deputy Program Manager's training and international experience provides essential skills to carry out assessment activities.

- Conclusions: SUSTAIN has been very understaffed to implement the ambitious program anticipated in the Cooperative Agreement, especially during the period 1994/1995. Staffing is now adequate to carry out the remaining tasks under the current CA. The excellent performance of the past four- and one-half years is remarkable in light of the few persons available to do the work, and is evidence of the staff's ability to obtain and utilize effectively important contributions from the volunteers, who have served on the Steering Committee and abroad. However, if SUSTAIN is to achieve the growth and diversified funding base hoped for by it and USAID, several more staff will be required. For one thing, it is unlikely that one person can continue to plan and manage the program and also focus adequately on fund raising and diversification of SUSTAIN's sources of support. Some of the Executive Director's responsibilities will have to be taken on by another senior-level person. One observer expressed concern that SUSTAIN's fortunes already depend too much on the Executive Director.

- **Recommendations:** The Team recommends that SUSTAIN maintain the concept of a small core group to conduct and coordinate its activities. However, SUSTAIN and USAID should review carefully the anticipated workload and skills required to implement any CA extension and make provision for any staff additions in its budget. This is complicated by the fact that staff must not only implement the CA scope of work, but must also build an independent institution in the process, a USAID objective. Therefore, SUSTAIN will require enough staff to allow one or more persons to dedicate adequate time and energy to building relationships and fund raising.

c. The Volunteers

Measured by any standard, the volunteers are a very impressive group. They represent the major food industry technical leadership. Their skills and expertise would be expensive to replicate. The SUSTAIN staff and key Steering Committee members, responsible for recruiting the volunteers, have done an outstanding job. Based upon the Team's interviews with approximately one-third of the volunteers who have served, and from review of many reports, as well as direct feedback from some beneficiaries of their work in Guatemala and El Salvador, it is clear that the volunteers are an exceptional group, well-matched to SUSTAIN's mission. It appears that recruitment has been easy, i.e., volunteers express great enthusiasm for sharing their skills and know-how with business counterparts from LDCs. (The quality of their performance will be discussed in 2.a-c, pgs. 23-26.) Most volunteers have been recruited by referrals, one volunteer to another, sometimes within the same company. They have agreed to serve for altruistic motives and as an opportunity to see and learn about other countries, and their people and food industry practices. They are not volunteering with the expectation that direct benefits will accrue to their employers; however, many expressed a firm belief that whatever they can do to improve products, strengthen enterprises, and build strong and stable economies in less-developed countries, will benefit the U.S. (and the world) in the long run.

Some volunteers have served on their own time, usually vacation time if with an employer. Others have served without any pay, if independent consultants or retirees. Still others have continued to draw salaries during missions, so that in effect, their employers have donated their time. This latter example is also usually the case when volunteers attend Steering Committee and other SUSTAIN meetings, and events in the United States. Several volunteers noted that they have less time available now for volunteer activities as the result of recent "downsizings" and "reengineering" within their firms (leaving the firms with fewer people to perform the same functions). This could hurt SUSTAIN's recruitment efforts for employed volunteers for some assignments, and place retirees more in demand. This would be unfortunate, because ordinarily the currently employed are the individuals best suited for assignments that call for the latest technologies and industry developments, and can best "market" SUSTAIN within the U.S. business community.

- **Conclusion:** The SUSTAIN volunteers are an exceptionally talented, experienced, and dedicated group of food industry professionals. Based on feedback from individuals the volunteers have served, they have performed extremely well under frequently difficult conditions.

d. Steering Committee

The Steering Committee has been a key factor in SUSTAIN's successful performance. It has played a very active, supportive role in several ways: 1) it has served as a sounding board and source of advice on program strategy and direction; 2) its members have helped to identify and recruit many of the volunteers; 3) members have provided technical and planning assistance to the staff on individual bases; 4) they have helped to secure funds and specialized expertise for the staff (e.g., legal services, computers); and 5) members have spoken on behalf of SUSTAIN at industry meetings to publicize its services and expand awareness of the Project and its activities. Recently, some members have formed a working group to spearhead fund raising efforts among private sector sources, to diversify SUSTAIN's funding sources, and support its incorporation as an independent entity. Steering Committee members tend to be some of SUSTAIN's most active volunteers; some have served on a number of overseas missions and/or bring special and valuable experiences and skills to the group. It is fair to say that the Steering Committee has been an integral and indispensable part of SUSTAIN, and not merely a formal external advisory body; i.e., its members have "steered and rowed."

e. Progress Reports

Quarterly Reports:

The Cooperative Agreement requires that SUSTAIN submit quarterly reports of its activities. SUSTAIN has prepared 17 quarterly reports to date. The reports provide a good concise picture of project activities during each quarter, and are well organized under four major headings:

- I. Overseas Actions
- II. Information Dissemination and Promotion
- III. Operations and Administrative Activities
- IV. Principal Constraints and Efforts to Overcome Them.

The requirement for quarterly reports is stated somewhat differently in two separate attachments to the Cooperative Agreement. Attachment 1 calls for

"Brief quarterly program performance reports" which include a) "a comparison of actual accomplishments with the goals established for the period,; b) reasons why established goals were not met; and c) other pertinent information"

Para. B.3. Quarterly Activity Reports, states

"SUSTAIN prepares quarterly reports which summarize project activities, budget expenditures, and planning for the balance of the year."

While the quarterly reports produced to date amply meet the requirement of the CA stated in Para B.3., they do not meet those stated in Attachment 1 above, where accomplishments are compared with established goals.

The earliest reports in FY '92 were not as well organized as the current format, adopted for use in FY '93. Each report is five to seven pages, sufficient in length and coverage for their designated purpose.

Contents of reports have varied. Those prepared midway through the Project reported on the agendas and outcomes of Steering Committee meetings; more recent reports have not. Readers seeking information on Steering Committee activities must now find them elsewhere. Until the last two quarterlies (4th quarter, 1995; 1st quarter, 1996), reports had included a section on the completion and distribution of mission summary reports. Leaving this information out from these latter two reports represents a major omission, since these reports represent the final phase of the overseas missions. When this information was included previously, distribution dates and a dissemination list were not included; this left the reader without any information about how long after the mission the report was completed or to whom they were sent. Several reports in FYs '94 and '95 included itemized listings of meetings and telephone calls that staff had made during the quarter; this was too much detail for such reports and fortunately was discontinued.

While reports do include a detailed listing of the written technical assistance requests that were responded to, they do not reveal how many were received. Consequently the reader cannot tell if demand for the service is changing, or if the gap between requests and responses is growing or declining. It is clear, however, that responses have dropped precipitously since FY '94. The reason given for this decline is lack of staff. Now that the Food Technology Manager is on board, this should improve.

In general, the quarterly reports provide a very good synopsis of overseas actions, both completed and planned. Although well written, the brief summaries frequently omit small, but key, pieces of information that detract from a complete understanding of the activities. These include: volunteers' names; location of activities; how something was arranged; dates, etc.

It will only be useful to strengthen the quarterly reports if their readers would benefit. At the present they are distributed routinely only to the USAID Project Officer in G/PHN/HN/NMH and to Steering Committee members. They are sometimes sent to others on a case-by-case basis,

such as other USAID staff. The Project Officer advised the Team that he finds the reports to be very informative, well organized and written, and concise, and that they meet his program monitoring needs. In the future, however, as SUSTAIN seeks and receives funding from more diverse sources, the content, design, and quality of periodic progress reports will become even more important.

Annual Progress Reports:

SUSTAIN has prepared Annual Progress Reports for FY's '92 through '94; the report for FY '95 is still pending. They summarize each year's work and, except for FY '94, provide a synopsis of planned activities for the upcoming year. While the reports are concise and well-written, they are not uniform in content, format, or style. Their length varies between seven and 14 pages. The reports for FY's '92 and '94 use a basic outline format similar to that used in the quarterly reports. By contrast, the FY '93 report employs a more narrative, strategically-oriented format, contains messages from USAID and SUSTAIN officers, and provides highlights of work performed. It appears to have been intended to serve as a marketing tool. According to SUSTAIN, that format was discontinued because it did not serve a real need and it required extra time and effort to prepare. The FY '93 format, however, could be useful for "marketing" purposes to selected audiences, or as a brief companion piece to the annual report.

The other more straightforward informational reports (FY 92 and FY 94), review all work completed the previous year. That format is more appropriate for annual progress reporting to funding agencies and others interested in complete reviews of work performed.

- Conclusion: SUSTAIN's quarterly and annual progress reports have been informative and well-written. They meet the requirements described in the Cooperative Agreement and currently meet the needs of the USAID Project Officer.
- Recommendations: While the quarterly and annual progress reports meet the needs of the USAID Project Officer, there may be value in reviewing the format and content of these reports. Specifically, given the important role the Steering Committee plays in guiding SUSTAIN, quarterly reports should include a summary of their activities and recommendations. Additionally, the quarterly report should return to incorporating a section on the completion and distribution of mission reports.

2. Technical Services

a. Assessment Missions

The SUSTAIN volunteers have performed their overseas missions exceptionally well, as reported to the evaluators by workshop participants, local cosponsors, USAID mission staff, and

the volunteers' own reports. Volunteers report that the local sponsors or collaborating organizations, and the beneficiaries (client enterprises or workshop participants), have all been very responsive to their messages, appreciative for the assistance, and attentive to the volunteers' needs in the countries.

SUSTAIN volunteers have performed two types of assessment missions. The first type is broad, food-sector-wide demand for services and/or the capacities of national institutions to participate with SUSTAIN, e.g., Belize, Cameroon, Guatemala, Hungary, Uganda. Volunteers appear to have successfully identified priority needs, which could be appropriately addressed by SUSTAIN, and local organizations interested in serving as in-country hosts and facilitators, e.g., the Institute for Nutrition in Central America and Panama (INCAP), the Uganda National Bureau of Standards (NBS), the Guatemalan Association of Food Technologists (AGTA), the Uganda Manufacturers Association (UMA), Groupment NAAM, the El Salvadoran Coffee Cooperative (UCRAPROBEX), and the Ministry of Agriculture in Eritrea. The volunteers who conducted these assessments were well-suited to the tasks, i.e., their technical qualifications and understanding of, and sensitivity to, the conditions in the respective countries, are evidenced by the enthusiastic responses from the national counterparts, the high quality of their reports, and the successful missions that followed.

A second type of assessment mission is more narrowly focused on particular issues within a broader SUSTAIN program in a particular country, e.g., INCAP's pilot plant; planning for specific workshops; and bakery capabilities, all in Guatemala. These focused assessment/planning missions are very useful in helping to prepare for subsequent workshops. The reason this type of assessment mission has mostly been performed in Central America, is probably due in part to the region's proximity to the U.S., with the time and costs required being relatively low, and to a large extent strong local interest and support.

The fact that some country assessment missions do not lead to many, or any, subsequent missions in those countries is not a negative reflection on the usefulness of the assessments. For example, the two assessments to Nepal (Food Testing Laboratory and Dairy Processing) revealed that conditions were far too primitive to warrant and benefit from SUSTAIN services. According to the Mission Director who served at that time, the volunteers' findings saved USAID and others from investing in unfeasible activities. Lack of follow-up missions in Belize and Cameroon was apparently due to termination of USAID support in those countries and not to lack of demand or quality of the assessments performed.

b. Technical Assistance Consultation Missions

Technical Assistance (TA) Consultations are conceived as providing technical advice and problem solving for a single enterprise per mission. Whereas the Cooperative Agreement anticipated 27, SUSTAIN has conducted only 11 (see Table 1, pg. 6). SUSTAIN, supported by

USAID, decided to minimize this type of mission in favor of workshops, because the latter have the potential to impact on more enterprises. Workshops are usually held for 20 to 25 participants, each of whom represents one company (although some enterprises send more than one participant).

Although the workshop concept of reaching more with less may apply generally, in some technical assistance consultation missions, there have been substantial multiplier effects. Two prominent examples include the Burkina Faso potato storage and the El Salvador organic coffee projects. In each case, the direct recipient of the assistance was a cooperative "apex" organization which represents and handles processing and marketing of products for numerous cooperatives; each cooperative in turn has numerous individual producer members. The benefits from the SUSTAIN interventions in those cases passed rapidly and directly to the farmers who produced the potatoes and coffee.

In view of the strong positive results reported from those technical assistance missions, SUSTAIN should consider supporting more missions, if the prospects for multiplier effects are strong. Cooperatives lend themselves naturally to such multiplier effects, and some for-profit enterprises, which perform similar functions, could have comparable impacts. One advantage of the TA missions is that a volunteer has the opportunity to become very familiar with the operational issues confronting the enterprise and with the people involved. This is, of course, strengthened if the volunteer can make several follow-up visits to reinforce the earlier work and to ensure application of measures recommended previously. The volunteers in Burkina Faso and in El Salvador did this with outstanding success.

c. Workshops/Site Visit Missions

As noted above, workshops have gained prominence during the past few years; (workshops are coupled with one- or two-day site visits to several enterprises). They have proven to be an efficient means for transferring knowledge from the volunteers, whose time is scarce, to groups of persons who can apply the knowledge in their businesses or government agencies, or who can act as trainers of others. The workshops have been very successful in terms of communicating important information clearly.

According to a number of persons who have participated in workshops in Guatemala and El Salvador, the volunteers made excellent presentations, supported by excellent visual aids and materials. Feedback from participants and sponsors of workshops in other countries is similar. Even though only two volunteers were Spanish speakers, Central American respondents assured the evaluators that language was not a serious problem. Some said Spanish fluency would have permitted more informal interaction between the volunteers and participants, but that the workshop goals were certainly met. In Guatemala and El Salvador very capable interpreters were used. The volunteers usually arrived in the countries two or three days prior to the

workshops to meet the organizers, make final preparations, and become oriented. Several beneficiaries suggested that it would be better for volunteers to have even more time in-country to become familiar with local conditions and the problems and technologies of the respective industries. This longer familiarization process could assist the volunteers in adapting their presentations more directly to their audiences. Interestingly, this was also suggested by several of the volunteers interviewed by the evaluators.

During the course of this Evaluation, several issues regarding workshops were raised as problems:

1. All participants do not have the same level of training and experience. Consequently, some comprehend less than others and are probably less able to apply in their work what has been communicated, than those with more advanced training and experience. Similarly, participants from less-sophisticated companies have fewer resources, infrastructure, and knowledgeable co-workers to support the application of new practices, some of which may require investment of funds in new equipment and machinery. Until now there has been no attempt to screen workshop applicants according to any set of criteria.
2. Participants are usually middle management technical staff of companies who are very aware of the need to upgrade their companies' practices, based on the workshop recommendations. However, according to several persons interviewed in Guatemala, the firms' top managers may not understand the need for change and do not support the technical staff's recommendations for change, especially if financial investments are required.
3. In those cases where the participants are expected to train others, based on what they learn from the workshops, extensive "leakage" or dilution of the content is likely because of varying levels of comprehension and personal initiative. If the extension agency does not have adequate funds and physical and managerial infrastructure to fully support the trainers' training programs, then far fewer ultimate beneficiaries will be reached. This appears to be the case of the Guatemalan Ministry of Agriculture Project for Small Fruit Producers (PROFRUTA), whose employees were the exclusive participants in the second Fruits and Vegetables Processing workshop. PROFRUTA trains cooperatives, campesino organizations, and women's groups, but because it is an agency of the Ministry of Agriculture and does not receive all of its annual budget (which is already inadequate for its mandate), its agents are unable to reach as many groups as planned.
4. It is much harder to observe the impacts from most workshops, than from technical assistance consultation missions. This is because concrete impacts from workshops

depend on the uses to which the participants put the information received. Information is likely to be dispersed in numerous locations and under very different circumstances and conditions. An AGTA representative in Guatemala acknowledged the difficulty of determining impacts from the many workshops held there, and said while he is certain there have been significant impacts, he could not cite any. An exception to this is the El Salvador cheese processing workshop for El Salvadoran National School of Agriculture (ENA) staff, where the ENA pilot plant itself has immediately adopted the workshop recommendations, including the use of a milk pasteurizer. A Guatemalan food industry consultant, who has attended five SUSTAIN workshops, claims that he has increased his consulting business as a result of what he has learned from the volunteers. These examples suggest a very positive multiplier effect and a demand for technical information via a workshop format.

In Guatemala, where SUSTAIN has conducted many workshops, including several repeats or follow-ups on the same subjects (bakeries, fruits, and vegetables), there is criticism that the effort has not yet become a planned and managed "program" with clear objectives and a strategy; it is seen instead as a continuing series of independent activities. Whereas AGTA representatives fault INCAP, SUSTAIN's primary partner there, the real reason probably rests more with SUSTAIN's insecure funding problems, short-term horizons imposed by USAID, and the inability or unwillingness of USAID missions to pay for follow-on work by SUSTAIN. SUSTAIN has been unable to make any long-term commitments to counterparts in any country because of uncertainty about receiving annual core funding increments.

Nonetheless, SUSTAIN is currently trying to develop a more programmatic approach in a few key selected countries or regions. It has made proposals to USAID for long-term programs in the LAC region and in El Salvador, focused on preparing food enterprises to compete in a globalized trading environment; in Uganda proposals are focused on helping to upgrade the food processing industry. If adequate funding can be assured to support several years' work in these countries, then SUSTAIN can plan and implement more coherent programs of strategically-related workshops and other technical services.

- Conclusions: The missions have been performed very well by technically-qualified volunteers. The SUSTAIN staff has done an excellent job of generating or responding to requests for services, identifying, recruiting, and preparing volunteers for assignments, and in getting them to and from countries.

Workshops have been well attended, have received positive feedback, and have focused on topics of importance to local food industries, such as quality control, food safety and hygienic practices, good manufacturing practices, HACCP, packaging, and marketing.

The technical assistance consultation missions have been directed at issues important to the respective countries in which many small- and medium-scale producers participate, e.g., potato storage and corn milling in Burkina Faso, organic coffee production in El Salvador, cheese processing in Mexico, and seafood processing in El Salvador.

SUSTAIN has not placed adequate attention on impact determination in the planning and implementation of its overseas missions. This is most critical for the workshops. The outcomes of assessment missions can be seen primarily from the subsequent SUSTAIN missions that flow from them (although there could also be substantial local follow-up initiatives that have not included SUSTAIN participation). Impacts from the technical assistance consultations could have been determined, and still can be, by merely following up with the assisted enterprises. However, the absence of some quantifiable indicators, agreed to at the outset of the assignments, will hinder any effort to capture impacts from past missions.

Workshops are the most difficult missions to measure impact. The current priority assigned to workshops by SUSTAIN and USAID, because of their assumed potential multiplier effects, cannot now be justified. This is due to lack of evidence that the numerous participants have indeed applied the information and obtained concrete results. It appears that some of the direct technical assistance consultations have achieved far greater impacts and have affected more enterprises/producers/families, than workshops have. This issue is of concern to SUSTAIN as shown by the extensive discussion of the issue at INCAP in September 1995.

SUSTAIN has amply demonstrated that it can efficiently organize and deliver very high-quality food technology know-how to individuals and enterprises in many LDCs. SUSTAIN has been able to direct a substantial proportion of its services to Central America; this strategy makes sense based on the region's absorptive capacity, on Central America's importance to the U.S., and on cost economies for SUSTAIN. However, SUSTAIN has not yet been able to demonstrate that it can really make a significant impact on a country's or region's food industry sector or sub-sector. This is SUSTAIN's next challenge, but will require reasonable assurances of sustained funding and institutional stability over a five- to ten-year period.

d. Mission Trip Reports

SUSTAIN has completed 62 overseas missions between October 1991 and April 1996; this averages almost four missions per quarter (see Table 2, pg.6 for fiscal year breakdown). A report has been prepared for each mission and is on hand at SUSTAIN's office. The evaluators reviewed more than one-third of these reports for content and found them generally

comprehensive, i.e., providing a very good picture of what was accomplished. Each report follows a similar format: brief substantive content written by the volunteers and followed by substantial appendices (which always include the SUSTAIN project description, biography of the volunteer(s), list of workshop participants, curriculum, and teaching materials for workshop). Workshop evaluation results (participant evaluations) are included in either the body of the reports or the appendices.

Reports of assessment missions and technical assistance consultation assignments are very different from most workshop reports. The former are quite substantive and analytical, and include numerous observations and recommendations for follow-up opportunities for SUSTAIN or others. By contrast, the latter is a one- to two-page narrative about the workshop, and includes the results of the participant evaluations, and only minimal site visit summaries. This is despite SUSTAIN's instructions to volunteers to report on the benefits expected, additional training or technical assistance anticipated, and any post-mission follow-up TA provided. Most workshop volunteers have instead concentrated on conducting the workshop and any related technical assistance site visits; only minimal attention has been devoted to the questions of impact and follow-on, asked of them.

It is recognized that these requirements may place too much of a burden on volunteers who take on very heavy workloads when planning and conducting workshops and site visits. However, this omission of information presents SUSTAIN with missed opportunities to learn important information about the countries' needs, and how SUSTAIN's services could be further used and expanded. The unique knowledge and experience of the volunteers could certainly be exploited beyond the valuable training that is provided during the workshops. Exceptions to this generalization include the Uganda Quality Control/Quality Assurance and Marketing Workshop (11/93), and the Uganda Packaging Workshop and technical assistance (8/93).

If the workshop volunteers cannot perform the extra analytical and "scouting" function because of lack of time or interest, then SUSTAIN (and USAID) should consider sending a SUSTAIN staff member or second volunteer along for this purpose, despite the additional cost of doing so. The trainees, their enterprises, and the host organizations, represent tremendous sources of information about the problems, needs, and opportunities of their countries' food industry sectors, which should be more fully exploited by SUSTAIN for program development purposes.

- Conclusions: The mission trip reports provide a very useful record of what was done by the volunteers for all of the assignments. All of the reports are well-organized, include appendices, and follow a standard format. Reports of assessment missions are quite analytical and provide good foundations for follow-on work by SUSTAIN. Reports of most workshops, however, provide only a record of the workshop curriculum, identify the participants, and give results of the post-workshop

evaluations; they provide little in the way of additional thoughts and insights about needs and opportunities for follow-on work. USAID and SUSTAIN are not taking

full advantage of these excellent volunteer talents and technical assistance services for program development and planning purposes.

e. U.S.-Based Technical Assistance and Training

SUSTAIN has assisted LDC food industry executives during their visits to the U.S. on many occasions, as highlighted below. This has included arranging for: U.S. volunteers to meet with visitors on an individual basis; technical consultations while attending IFT meetings; and attendance at workshops. These services have usually been provided to former technical assistance consultation and workshop participants as part of follow-on support to them, although on several occasions SUSTAIN has arranged special workshops for new "clients" at USAID's request. These services appear to have been useful to the visitors, and greatly appreciated by them. One such beneficiary in Guatemala reported to the Team that SUSTAIN's help in expanding his contacts among U.S. food industry executives, while attending IFT meetings, was very helpful. SUSTAIN's Steering Committee members and other volunteers have played a major role in providing these services. Highlights of U.S.-based TA and training include:

- Ugandan attended International Soybean Program (INTSOY) course and met with officials in Washington.
- Central Americans visited Wisconsin slaughter houses to observe waste handling and utilization practices.
- Uganda Manufacturers Association (UMA) representative received food technologies training, including information management, attendance at IFT annual meeting, and tours of U.S. manufacturing plants.
- Volunteers participated in USAID workshop for African leaders to plan private sector activities in Africa.
- Ugandan Director of the National Bureau of Standards (NBS), and a Madagascar businessman participated in the IFT annual meeting; meetings were arranged for the Ugandan with the U.S. Department of Agriculture, the U.S. Food and Drug Administration, and the National Food Processors Association.
- Volunteers made presentations on food processing technologies and marketing to African trade and investment promotion advisors at a USAID workshop in Washington.

- Russian dairy industry executives visited U.S. dairy and packaging plants.

f. Written Technical Assistance Requests

The subjects of the written requests have been very diverse. They have ranged from general information about SUSTAIN, to requests for financial assistance and market contacts, to concrete questions about manufacturing of specific products. Of the 146 requests received since 1990, 63 are from Latin America, 54 from Africa, 20 from Asia, and the remainder from the Middle East, Eastern Europe, and the U.S. (see Table 4, pg. 8).

Until 1995, SUSTAIN had assigned one staff member to respond to these requests, including soliciting input from some volunteers and other sources. When that individual left, SUSTAIN turned to several graduate student interns who continue to handle the few requests currently being received. The Team did not review actual responses to determine their adequacy, but the record shows that almost all requests have been responded to by SUSTAIN directly; two were forwarded to other organizations for action.

The numerous requests from many countries where SUSTAIN has not provided direct services, indicates that its marketing of its services has been effective via *SUSTAIN Notes*, USAID and CLUSA mechanisms, and other means. Moreover, its responses have probably triggered additional requests from others. Therefore, it appears that this activity is a means of building awareness and a potential market for SUSTAIN's primary services abroad. However, given SUSTAIN's serious funding problems and uncertainties during the past several years, this low-priority and probably low-impact activity, has represented a burden on the Project. It does not warrant expenditure of much time and resources.

- Conclusions: SUSTAIN has done a good job of generating and responding to TA requests, but is correct in trying to minimize this activity now. It does not warrant expenditure of much time and resources by SUSTAIN, given current financial constraints and institutional transition. SUSTAIN should continue to respond promptly to any requests that come in, but not solicit or encourage them.

g. SUSTAIN Notes

USAID and SUSTAIN feel that *Notes*

"has had an important impact and has served as a means of informing and educating a wide range of persons involved in developing country food industries."

Notes has generated a number of inquiries and requests for further information, especially the extrusion technology article. The articles are well written and provide substantial technical information clearly that should be easily understood by readers of varying levels of sophistication. The volunteers interviewed by the evaluators were generally familiar with *Notes*. They believe them to be useful publications, but could not say specifically who actually benefited from them. The author of the extrusion article explained that he targeted the technical level toward LDC readers, devoting considerable time and effort to reducing it down to the limited space available, at SUSTAIN's request.

The first six editions of *Notes* provide very little information about SUSTAIN's programs and activities, with the exception of Vol.4-2, announcing the receipt of the current Cooperative Agreement in September of 1991. By contrast the last two editions include lists of recently completed and planned SUSTAIN missions. This feature helps greatly to give readers a sense of the nature of SUSTAIN's services, and how services could be helpful to them. Even more information about SUSTAIN activities would probably be useful.

- Conclusions: *Notes* feature technical articles have been excellent. They are well received among diverse audiences abroad and in the U.S. and have helped to establish or maintain SUSTAIN's technical credibility.

SUSTAIN Notes could have been used more effectively to disseminate information about SUSTAIN's activities to potential LDC users, via USAIDs and directly, and by publishing them more frequently, as planned. However, given the shortage of funds and staff, and uncertainties about SUSTAIN's existence during most of the past four years, it is prudent of SUSTAIN (with USAID's support) to reduce the frequency of *Notes* publications.

Even if less frequent in the future, *Notes'* contents should include more information about the Project and its activities. For example, profiles of some volunteers would give prospective clients a better understanding of the type of expertise and experience that could be provided to them. Brief summaries of some missions would reveal the kinds of work performed and the types of clients served.

If funding and staffing grow sufficiently in the future, *SUSTAIN Notes* should be published three to four times per year; if not, *Notes* should be published at least semiannually. *Notes* should continue to include lead articles on appropriate technical topics as in the past, but more information about the Project's work and people (providers and beneficiaries) should be included.

C. PROJECT IMPACTS

1. Nutritional Impacts

As discussed earlier, the Project concept and design, using volunteers to provide short-term technical assistance to food processing enterprises, allows little opportunity for direct nutritional impact on at-risk women and children. While a few projects have been aimed directly at these at-risk population groups (Nigeria weaning foods; Guatemala enriched school cookie and vitamin A-rich sweet potato gruel), SUSTAIN inputs have been minor and no attempt has been made by the local collaborators to determine the impact of SUSTAIN's contributions.

The Project should help to improve the nutritional and health status of the broader populations in countries where it has had opportunities to work with a number of companies on improved food safety and quality control practices—primarily Guatemala and other Central American countries. However, these impacts will require many other actions by the respective food companies, and a longer time frame to materialize. Consequently, there is no evidence available to confirm that such impacts have resulted from SUSTAIN's services.

2. Impacts on Beneficiary Enterprises

There is substantial anecdotal evidence that many direct beneficiaries (firms, cooperatives, government agencies, and individuals) have applied and benefited from the information provided by the volunteers; however, the benefits cannot be quantified. It is much easier to detect how the information has been applied in the cases of direct technical assistance missions, such as the El Salvador organic coffee and Burkina Faso potato storage projects, than from workshops. Numerous participants return to their organizations after workshops and may or may not succeed in applying what they have learned. SUSTAIN has not been equipped to provide follow-on assistance to them and their employers. SUSTAIN could do more however, to follow up with them and learn about what they have, or have not, been able to accomplish.

3. Impacts on U.S. Volunteers and Their Employers

A number of volunteers reported that they and their employers have benefited from their SUSTAIN experiences in tangible and intangible ways. According to some, they have acquired a better understanding of the nature and technological level of food industries and products in particular countries, information they find useful for themselves and their companies. A few claim that specific business relationships have resulted, or could result, from their assignments. In fact, McCormick & Company of Maryland has established a business relationship with a Ugandan company to purchase and distribute vanilla, a local agribusiness initiative supported there by the USAID Mission.

Many volunteers say that their experiences have broadened their awareness of other countries and have given them an appreciation for the constraints faced by their industry counterparts. All volunteers interviewed assert that their service has had a positive impact on themselves: they are satisfied that they have provided a meaningful service which has been genuinely appreciated by the beneficiaries; they have encountered serious professionals, who are eager to learn from them. For the most part, these benefits have been intangible, but real.

4. Impacts on National Economies

UCRAPROBEX, the El Salvador coffee cooperative association, has calculated that organic coffee production, resulting in part from Project SUSTAIN's volunteers' contributions, generated additional export earnings of \$600,000 in 1995, most of which has gone to campesino family coffee growers. Although no other quantifiable benefits could be identified in the course of this evaluation, respondents in Guatemala claim that training in HACCP practices, provided by SUSTAIN (and other groups), will enable Guatemala to continue to export food products to the U.S. after 1996, when HACCP certification will be required for all imports from Latin America. If countries cannot be certified, they will lose out on millions of dollars of exports. This provides a compelling rationale, and strong demand, for SUSTAIN HACCP training workshops.

D. RELEVANCE TO USAID STRATEGIC OBJECTIVES AND TO FUTURE USAID AND U.S. BUSINESS PRIORITIES

By providing technical information and advice to LDC food processing (agro-industrial) enterprises (for-profit firms and cooperatives), SUSTAIN's services fall within two of USAID's strategic objectives included in most Washington bureaus/offices and overseas mission programs. They are: health and nutrition improvements; and income/economic growth.

- Health and Nutrition Objectives: USAID's long standing and current priority target groups for its health and nutrition programs are the most vulnerable, at-risk women and young children, usually found among low income rural population groups. These groups have very little capacity to purchase many processed and packaged food products sold by food processing industries. Consequently, SUSTAIN's normal clients have little relevance for this group in terms of increasing their consumption of improved nutritious food products, unless the enterprises are participating in some kind of subsidized nutrition improvement program. Only three of 62 missions have been directed toward this target group, mentioned earlier: Nigeria weaning foods (1992); Guatemala fortified school cookie (1993); and Guatemala vitamin A-rich sweet potato cereal (1993). While there has been no follow-up to the Nigeria mission,

which was aimed at commercial production of a weaning food, the Guatemalan projects continue, supported by donor and/or national government funding.

It is likely that some cost savings and other benefits from improved product quality and safety, and improved efficiency and productivity, will make more and better processed food products available and affordable to the poorer strata of LDC societies. Since improved and expanded processing reduces crop losses from spoilage, food prices should theoretically drop. If a USAID objective is to assist countries to improve the quality, safety, availability, and affordability of, and markets for, locally-grown food products, all of which SUSTAIN projects have contributed to, then SUSTAIN is relevant to USAID's strategic health and nutrition objectives. But, the challenges of measuring SUSTAIN's concrete contributions toward these outcomes, remains.

Based on SUSTAIN's performance to date, it could substantially increase its contribution toward improved nutrition for at-risk women and children if it could participate with other USAID service providers in ongoing nutrition programs. For example, SUSTAIN could contribute food technology skills to food fortification or weaning foods development activities of related USAID programs such as the Opportunities for Micronutrient Interventions (OMNI) Project and the Basic Support for Institutionalizing Child Survival (BASICS) Project. Unfortunately, USAID's contracting mechanisms and program management practices make such collaboration difficult.

- Economic Growth Objectives: Most of SUSTAIN's clients are small- to medium-scale food processing enterprises, whose raw materials derive from food crops produced by small- to medium-scale farmers, and whose products are sold locally. Exceptions include flour mills using imported wheat, organic coffee exported to the U.S., and some others. The post-harvest losses of many of these crops are currently very high as the result of inadequate storage, handling, transport, and processing infrastructure. To the extent that SUSTAIN can help to strengthen these storage, handling, and processing practices, producers and processors can earn more and consumers could pay less for better quality food. Thousands of farmers and workers are employed in supplying the raw materials for, and producing the products of, the enterprises assisted by SUSTAIN. Many thousands more consumers of all economic and social strata benefit from safer, higher quality, more attractive, more available, and possibly, more affordable, processed food products.

III. Critical Issues

A. IMPACTS

Many SUSTAIN workshop participants, volunteers, in-country collaborating institutions, and beneficiaries of direct technical assistance consultations have cited specific results and impacts from SUSTAIN services. Some have asserted that impacts must have resulted because of the quality and relevance of the services provided. In anticipation of this evaluation SUSTAIN asked many of its previous beneficiaries to report on concrete follow-up activities that they have undertaken resulting from SUSTAIN consultations or training. The responses are encouraging, supporting the general impression of positive results. Unfortunately, however, SUSTAIN has not yet defined and implemented a systematic method for identifying and measuring those impacts. For its part, USAID has not required that impacts be determined and reported on. The availability of reliable impact information would be very helpful to SUSTAIN now as it attempts to interest new sponsors in supporting its program.

B. USAID RATIONALE FOR SUSTAIN

SUSTAIN's traditional clientele of small- and medium-scale food processing enterprises in USAID-assisted countries provide, for the most part, packaged food products for domestic markets. The products are typically purchased by middle and upper income consumers who can afford them. They are generally not consumed by the most nutritionally at-risk population groups to whom most of USAID's nutrition and health programs are targeted. This structural reality places SUSTAIN on the fringe of USAID's overall nutrition and health program portfolio, and diminishes its value as perceived by those staff responsible for these programs, in Washington and in the field. Its potential for contributing directly to the nutrition objectives of those programs by providing the expert services of its volunteers in conjunction with other USAID services providers, has not yet been tapped to its fullest extent.

Despite the fact that few of USAID's primary health and nutrition program target groups can afford to directly purchase many of the products produced by SUSTAIN clients, the potential for long-run benefits from SUSTAIN's assistance to impact on these vulnerable groups is substantial. As processing expands and practices improve, post-harvest losses diminish and supplies increase with possible commensurate reductions in price. SUSTAIN has devoted major

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attention to improving food processing sanitation and quality control practices; this can have a direct impact on reducing the incidence of disease among the entire population. Many of the raw food products purchased for processing by the SUSTAIN clients are produced by small-scale independent farmers, cooperative members, and/or farm laborers (fruits and vegetables, coffee, corn, beans). SUSTAIN's services can have an indirect positive impact on their incomes as demand from processors rise, and increased efficiencies and productivity from technical and management innovations reduce operating costs. The UCRAPROBEX coffee cooperative estimates that Salvadoran coffee producers (small-scale farmers) earned a \$600,000 premium in 1995 by producing organically grown coffee. A SUSTAIN volunteer played an indispensable role in that program's success.

However, because these economic and income-related benefits, about which SUSTAIN has only anecdotal or partial information, have only indirect nutritional and health impacts on the USAID target population groups, SUSTAIN is seen as having little relevance to USAID's health and nutrition strategic objectives. There is one notable exception to this, food fortification. SUSTAIN is beginning to work on food fortification issues on behalf of two USAID Bureaus: 1) BHR, for foods distributed through emergency and supplemental feeding programs; 2) LAC, to assist countries' food industries to strengthen fortification of staple foods in the context of new trade agreements. This is a USAID health and nutrition strategic priority and should strengthen USAID's rationale for continuing to support the SUSTAIN Project.

SUSTAIN has had strong support from several USAID missions where its agribusiness, food processing services supplemented the missions' agricultural, rural development, and cooperative development programs, e.g., El Salvador, Burkina Faso, Cameroon, Uganda, Indonesia, Nepal, and Fiji. In these cases SUSTAIN volunteers made key short-term inputs to larger ongoing programs on a very high-quality, low cost basis. The fact that a USAID mission, or CLUSA, in the case of El Salvador, did not need to commit funds for a long-term contract for services, but rather could call on SUSTAIN as needed, was probably very attractive. Unfortunately, however, these programs are currently being reduced as USAID faces budget cutbacks; SUSTAIN, therefore, may not find many countries to work with on this basis. Those that do remain, may find SUSTAIN's low cost, high-quality services attractive in a cost-conscious environment.

The LAC Bureau has recently identified a new reason for retaining SUSTAIN's services: to assist Latin American enterprises in preparing themselves to compete in the new "globalized" trading environment. The evaluators found the prospects of globalized trade to be of great concern to most of the businessmen with whom they spoke in Guatemala, and the source of strong demand for SUSTAIN's assistance in upgrading their food safety, quality control, HACCP, and packaging skills. To the extent that USAID will want to help these enterprises to compete and survive, SUSTAIN can help. Trade globalization presents a strong rationale for

USAID to enlist SUSTAIN's services and to support its survival, growth, and transition to an independent PVO.

C. IN-COUNTRY USAID SUPPORT

The SUSTAIN Project and its volunteers are held in high esteem by those in USAID missions who have had direct experience with them. Since SUSTAIN usually appears on the scene as an ad hoc Global Bureau resource offering specialized short-term technical services that are not part of missions' bilateral programs and budgets, it receives little of the kind of support it needs—funding. In Nepal, they only received \$15,000 and in Guatemala where almost half of SUSTAIN's work has been concentrated, the Guatemala USAID mission does not provide any bilateral funding to SUSTAIN and appears to be uninterested in its services because they lie outside the parameters of its child survival health sector strategy³. USAID has not fully utilized SUSTAIN's food technology expertise in its health and nutrition programs. As long as food processing, safety, and quality are not strongly linked across health/nutrition and agriculture/economic growth objectives, SUSTAIN will continue to have difficulty in receiving support from USAID missions.

D. FUNDING AND INSTITUTIONAL SUSTAINABILITY

Project SUSTAIN is at a critical juncture—it has proven its value; there is strong demand for its services from LDC businesses; it can enlist the volunteer services of highly skilled professionals; it is in the process of becoming an independent entity—yet its survival is threatened by poor funding prospects.

USAID intends to extend the term of its Cooperative Agreement by two years, but the amount that will be allocated for "core" funding is tentative, due to the Agency's own severe budgetary constraints. USAID missions are facing the same problems, and are not likely to provide "field support" funds for SUSTAIN activities in their countries—SUSTAIN appears to be seen as helpful, but not essential, to their strategic objectives.

SUSTAIN is assured of funding for its MAP CA from USAID/BHR. In addition, BHR has transferred funding to G/PHN/HN for a field analysis of an enhanced Vitamin C product under the PL480 Title II Program. SUSTAIN's discussions with the Inter American Development

³They have provided \$140,000 for LAC regional activities, some of which have been carried out in Guatemala.

Bank are still at a preliminary stage, and its newly formed, fund-raising working group is just getting started.

LDC beneficiaries can probably continue to pay for some of the local costs involved with SUSTAIN's services, but even that capability will be reduced in some places as in-country USAID support to national or regional participating organizations diminishes, e.g., USAID institutional support funding for INCAP will terminate in June 1996.

Unless USAID determines that SUSTAIN contributes importantly to one or more of its priority strategic objectives, SUSTAIN faces the prospect of receiving little or no USAID funds in the future. SUSTAIN does have one advantage, however, in competing for scarce USAID resources. It can provide unique, high-quality technical services at low cost because of the substantial in-kind contributions of its volunteers and their employers. The evaluators were told by USAID staff on several occasions that they will seek low cost vendors who can make matching contributions toward the costs of providing technical services. During the past four years SUSTAIN has more than matched USAID's funds from its volunteer contributions. This excellent performance should help SUSTAIN to leverage USAID funds. Nonetheless, it will need new independent sources of funds to support its basic operations and to strengthen its case for receiving USAID funds.

E. STRATEGIC PROGRAMS VS. A SERIES OF MISSIONS

SUSTAIN does not have the resources, nor was it intended to undertake long-term programs in countries where it could work with local counterparts to develop a strategy, plan of action, and a series of related interventions to accomplish concrete sector-wide objectives over the course of several years. Now, however, in Central America, due in large part to SUSTAIN's successful implementation of numerous related, but not strategically planned activities, there is strong demand from local counterparts and beneficiaries for SUSTAIN to plan and carry out a long-term strategic program focused on food safety, quality control, HACCP, packaging, and marketing. This assistance is needed to help the region's private sector confront the competitive pressures of trade globalization. Such a program in Central America, and perhaps elsewhere, poses a serious challenge to USAID to fund it, and to SUSTAIN to ensure the availability of appropriate volunteers as needed over an extended period of time. The types and duration of services required could change to meet the needs of such a program.

IV. Conclusions and Recommendations

A. IMPLEMENTATION PERFORMANCE

1. Conclusions

Project SUSTAIN has been implemented extremely well. The NCBA/SUSTAIN team has achieved the purpose and outputs set forth in the Cooperative Agreement. They have met the objectives to the complete satisfaction of the beneficiaries and USAID missions, with one exception: the special emphasis on at-risk women and children and on enrichment of local and weaning foods was not realized.

NCBA/SUSTAIN has implemented the Project with a small staff, a modest budget, and a corps of dedicated and very effective food industry volunteers. The Steering Committee, a subset of the volunteers, has provided valuable guidance and extensive assistance to the staff at their own, or their companies', expense. The overseas missions have been well planned and executed, Project publications and reports well done, and relationships with overseas clients and U.S. volunteers, excellent. Sixty-two overseas missions have been carried out as the result of SUSTAIN's effective marketing, not as the result of spontaneous USAID field demand.

Geographic distribution of missions has evolved as the result of requests received. The development of an excellent partnership with INCAP in Guatemala helped to establish a predominance of SUSTAIN activities in Central America. If the Central America concentration had not materialized, the Project would probably not have carried out the same number of missions, since demand for its services from Africa, Asia, and South America has been modest. This is due in part to the fact that Project SUSTAIN has not been in the mainstream of USAID programs world wide. While it has a valuable service to provide in support of several USAID strategic objectives, USAID has not made full use of it.

2. Recommendations

- Continue the same focus on transferring knowledge and technology regarding food safety, quality control, good manufacturing practices, and marketing of foods and related products. Give consideration to expanding this focus slightly by adding nutrition, or nutritional value of foods.

- To the extent possible, SUSTAIN services should be incorporated into USAID mission programs in collaboration with strong local academic and industry institutions (e.g., INCAP and AGTA). SUSTAIN is a unique and valuable resource which USAID could use to greater advantage in support of its food and nutrition, and private sector development objectives.

B. PROJECT IMPACTS

1. Conclusions

Based on anecdotal evidence available to the evaluators in reports, letters from beneficiaries, and interviews with volunteers, beneficiaries, collaborating organizations, and USAID staff members, the following conclusions have been reached regarding the Project's impacts:

- Food technology skills have been transferred to hundreds of LDC small- and medium-scale food industry personnel.
- The SUSTAIN volunteers and staff have created substantial good will on the part of the LDC food industry members toward the U.S. food industry.
- Many LDC food processing enterprises have applied the practices learned from SUSTAIN; however, there is no concrete, quantitative evidence of this.
- Many U.S. food industry technical leaders (SUSTAIN volunteers) have acquired a direct understanding and appreciation for third world food industry concerns, constraints, and opportunities.
- SUSTAIN has made very little direct impacts on the nutritional status of at-risk women and children, on enrichment of local foods, or on development or improvement of weaning foods. The basic concept and structure of the Project preclude it from focusing on these objectives. Few for-profit LDC food industry enterprises can afford to produce processed products targeted toward these nutritionally at-risk groups, without public sector subsidies.
- SUSTAIN has not attempted in a systematic way to follow up with its beneficiaries to determine impacts. USAID has not required that it do so.

- Project beneficiaries (enterprises and individuals) are receptive to follow-up inquiries from SUSTAIN or local partners, to determine how they have applied what they have learned; it would be feasible for SUSTAIN to carry out this kind of follow up.
- SUSTAIN must be able to plan and carry out long-term programs in specific countries in order to maximize impacts from its services. This long-term assistance should include support to the beneficiaries to apply new practices in their enterprises. To date, this has not been possible due to lack of funds, and uncertainty of continued funding.

2. Recommendations

- SUSTAIN should in a few countries immediately conduct surveys of its beneficiaries, in conjunction with its local partners, to determine how they have used the information obtained from workshops and from direct technical consultations. SUSTAIN should make a plan and budget for accomplishing this, utilizing available FY '96 funds. The results will serve as valuable baseline information for new program activities after September 1996, and as a guide for the design of longer-term programs which focus on maximizing impacts.
- In the future, SUSTAIN should develop better ways to evaluate both short- and long-term impacts of workshops. This may include pre- and post-tests for workshop participants, but should also include an assessment of how the information has been actually used by the participants and what the impact has been. SUSTAIN should require that groups requesting workshops or technical assistance consultations describe how they would evaluate the results and impacts of the missions. This will cost money and a SUSTAIN staff member should be designated an evaluation officer.

C. SUSTAIN'S INSTITUTIONAL AND FINANCIAL STATUS

1. Conclusions

As stated in Section III. Critical Issues, SUSTAIN's institutional and financial status is precarious. As an institution, SUSTAIN is in transition to becoming an independent stand alone entity. This is a very noteworthy and important step for a previously fully-funded USAID project to undertake. It is thought to be feasible because SUSTAIN has demonstrated that there is a strong demand for its services in certain LDCs, and that it can draw successfully on a large pool of excellent U.S. volunteers to deliver its services. However, it has no assurance of adequate future funding from its two primary sources: 1) USAID; and 2) private foundations. Although several regional bureaus and country missions have, or may, be able to provide some

funding, they will probably be restricted to the overseas operational costs only, and not be able to support home office expenditures. The Global Bureau has initiated a two-year extension of SUSTAIN's cooperative agreement, and core funding will be provided.

The Evaluation Team concludes that USAID's two-year contribution now will be critical to SUSTAIN's survival and emergence as a viable independent PVO, capable of supporting USAID's programs in the future. Adequate core funds now will give SUSTAIN the capacity to raise more funds from private sources; it will also demonstrate that USAID continues to value its services.

2. Recommendation

- The Evaluation Team recommends that USAID provide adequate funds for the next two years to enable SUSTAIN to:
 - make its transition to independent PVO status;
 - raise matching funds from private sources; and
 - implement longer-term programs in several countries/regions.

D. PROPOSED PROGRAM ADJUSTMENTS

The Team recommends that SUSTAIN pursue four program initiatives, identified as priorities for the future.

1. Incorporate a systematic impact evaluation component into its technical assistance consultation and workshop programs, capable of determining tangible results from the volunteers' contributions.
2. Design and implement long-term programs in Central America and one or more African country(ies), focused on a few food processing priorities, to achieve concrete measurable outcomes.
3. Design a program, in collaboration with its LAC counterparts, to assist food processing and marketing enterprises to deal with the impacts of global trade. This is consistent with USAID's priority for Income/Economic Growth. SUSTAIN has played, and can continue to play, a critical role in transferring the latest knowledge and technical skills to small- and medium-sized food processing companies. Assistance would need to expand beyond the current repertory to include global and local food regulations, standards, and guidelines; HACCP, ISO9000, and other quality control programs; and other export issues. The USAID/LAC Bureau has already decided to support this type of work by SUSTAIN in the region.

4. Design and implement technical assistance and training programs to support food fortification efforts in selected countries. This is consistent with USAID's health and nutrition priorities. SUSTAIN is currently implementing the Micronutrient Assessment Program for USAID/BHR. There are probably many local organizations who need help in learning more about the issues and opportunities presented by food fortification. A long-term, programmatic approach to this subject could have profound economic and nutritional impacts.
5. The Team also recommends that USAID arrange to apply SUSTAIN's volunteer services to its other health, nutrition, and private sector development, and agro-industry programs which require the type of food science and technology skills that SUSTAIN can provide. This would represent a change from SUSTAIN's traditional stand alone, short-term services to local businesses and would incorporate SUSTAIN's services more fully into USAID's long-term strategies and programs.

E. PROPOSED PERFORMANCE INDICATORS

To the extent possible, SUSTAIN should attempt to quantify its impacts. El Salvador's organic coffee project, with reported additional export earnings of \$600,000, due in part to SUSTAIN's volunteer contributions, may not represent the norm nor set the standard, but is a striking example of impact. This kind of information needs to be collected and reported.

Intermediate-level performance indicators are most feasible to define and measure successfully. They should focus on the direct use made by workshop participants or beneficiary enterprises of the information provided by the volunteers. This information can be readily obtained from periodic follow-up with these individuals/groups by questionnaires and visits, on a sample basis. For example, if an enterprise implements a HACCP program, it must maintain detailed records of specific actions on a daily basis. These records provide an objectively verifiable indicator of whether or not a HACCP workshop has made an impact on the enterprise's practices.

Some other indicators that may prove useful, particularly once SUSTAIN achieves independence, include:

- a measure of programmatic focus rather than a collection of individual activities;
- the quantity of USAID mission funds provided to support SUSTAIN activities;
- the quantity of non-USAID funds raised.

F. LESSONS LEARNED

1. The goal established for SUSTAIN was probably too ambitious. To assume that a program composed of a series of short-term technical assistance activities, targeted toward private food industry companies, could impact on at-risk women and children, is unrealistic.
2. Many highly-skilled U.S. food industry professionals (and university professors) are willing and able to serve as volunteers for short-term missions.
3. There is strong demand from LDC businesses for SUSTAIN services.
4. When all the pieces of a program—suitable volunteer, programmatic training, a strong client, and reliable in-country USAID support—come together, there can be real economic impact, as a result of SUSTAIN's services (e.g., organic coffee in El Salvador).
5. There may be other technical fields aside from food and nutrition that could benefit from using SUSTAIN's "volunteer approach."
6. SUSTAIN has not obtained concrete information about how its services have been utilized, largely because it did not incorporate any procedure for doing so into the workshop and technical consultations planning and implementation process. It would be very feasible to do so.
7. USAID has difficulty in recognizing that it has created a valuable and unique resource—one that is prepared to "graduate" to independent status and could be extremely useful to USAID in the future. SUSTAIN has succeeded in establishing productive links between the U.S. and third world food industry sectors, to the benefit of each.
8. USAID's funding, project, and contracting mechanisms have made it difficult for SUSTAIN to participate more fully in broader USAID programs that could benefit from its services. Competition for funds between missions and the Global Bureau, and between contractors appears to limit USAID's utilization of SUSTAIN.

Annex A

Scope of Work

INTRODUCTION

The purpose of this evaluation is to assess the performance and effectiveness of SUSTAIN in carrying out its activities under the current project cooperative agreement. As indicated more fully in the discussion of the objectives (see section II), the evaluation is intended to:

- a) provide a general assessment of SUSTAIN's performance and program impact;
- b) assist USAID in determining what (if any) program adjustments are warranted in anticipation of a follow-on cooperative agreement;
- c) propose a set of performance indicators for the assessment of future activities and how these may be measured;
- e) identify information and other data that would be useful for future evaluations;
- f) assess the impact of the program in areas outside of its current focus and make recommendations on the extent to which SUSTAIN's program scope may be expanded into these areas.

I. PROJECT BACKGROUND

A. Project Goal and Objectives

The current phase of Project SUSTAIN¹ was initiated in August 1991 following the conclusion of a Cooperative Agreement between USAID and the National Cooperative Business Association (NCBA). As stated in the initial grant agreement, the project's goal is "to improve the nutritional well-being of the populations of selected developing countries, particularly at-risk women and children, by ensuring the availability of higher quality, safer and more nutritional foods at reasonable prices."

In keeping with this goal, the project's purpose is to provide access to the experience and expertise of the U.S. food industry for developing country small-scale and medium-scale food processing industries in targeted countries and USAID-sponsored programs having components dealing with nutrition, food safety, food aid, and/or food production, processing, marketing and consumption.

The essence of the SUSTAIN program is the recruitment, organization and provision of volunteers from U.S. food industries to share their technical expertise and experience with persons

¹/ SUSTAIN is also known as the Food Technology and Enterprise Project, USAID Project No. 936-5120.

involved in the emergent food processing and marketing businesses of the target countries. The project design calls for the creation or adaptation of existing food processing and marketing technologies in order to increase the quantity, nutritional quality, safety and affordability of foods consumed by malnourished women and children in selected developing countries and to strengthen local food processing and marketing technologies.

The program's major objectives are:

- the transfer of knowledge and practical skills on food processing and preservation to individuals and businesses in the target countries;
- the improvement of the business management and marketing skills of developing country food industry personnel;
- the improvement of nutrition and the availability of more nutritionally beneficial foods for the at-risk populations, primarily women and children, of the target countries.

The program design anticipated that these objectives would be accomplished through on-site visits of the volunteers, field assessments, in-country training, technical assistance, and the project's informational bulletins and research materials. SUSTAIN's role is to serve as a catalyst to identify and focus attention on specific problems of nutrition and food safety. Because of the short-term and voluntary nature of SUSTAIN activities, in addition to implementing its own follow-on programs, it provides recommendations and brings the need for additional follow-up activities to the attention of host governments, private sector businesses, community organizations, and USAID.

B. Project Overview

The SUSTAIN program, which was established in the early 1980s with support provided by USAID's Office of Nutrition, draws upon the leadership and technical expertise of a Steering Committee comprised of leading food industry executives and technical specialists. These Steering Committee members and other volunteers contribute significant time and expertise to program development and strategic planning, as well as to the actual implementation of advisory services and workshops for food industries in developing countries. The committee members work individually with SUSTAIN staff on specific projects and participate in advisory meetings with representatives of host-country governments, private sector businesses and private voluntary organizations (PVOs).

The current phase of SUSTAIN activity was initiated in 1991 through a cooperative agreement provided to the National Coopera-

tive Business Association (NCBA). Within SUSTAIN, overall management responsibility rests with the Executive Director, while programming and policy matters are the collaborative responsibility of the Executive Director and the Steering Committee.

One of the objectives of the project was to revitalize, develop, and recruit a strong, dependable network of highly-qualified experts who are able to provide a rapid turn-around to requests for advice and technical assistance. SUSTAIN volunteer experts are available in all areas of food science, including nutrition, food product fortification, food processing, quality assurance/control, laboratory technologies, and packaging. To ensure a continually high level of professional standards, the volunteers are enlisted through a process of peer recruitment and review carried out through a standing network of SUSTAIN executives and experts. As a result of this "in-house quality control", SUSTAIN volunteers have continually demonstrated their effectiveness and have been well received by both the USAID missions and recipient country organizations.

In addition to the direct technical assistance provided by the volunteers, SUSTAIN also organizes and manages training programs on a variety of topics related to nutrition and food safety. Working closely with a wide variety of U.S. private sector organizations and public agencies, SUSTAIN has implemented training programs to transfer technical knowledge and skills to food businesses, health and nutrition institutions, food and agriculture organizations, cooperatives, PVOs, and research institutions in developing countries in Africa, the Near East, Latin America, Asia, and Russia. In carrying out its programs, SUSTAIN promotes collaboration between USAID and U.S. business and scientific expertise for the purpose of improving the quality, safety, and availability of food resources in the world's developing areas.

1. International Activities

SUSTAIN's international assistance activities consist of the following:

Assessment Missions -- In response to requests for assistance, after careful screening to examine the extent to which a SUSTAIN intervention might be beneficial, an initial assessment mission is organized. The assessment team usually consists of two volunteer food industry consultants and a SUSTAIN staff member.

The assessment missions have several important functions: (1) they permit a first-hand examination of the situation for which SUSTAIN assistance has been requested; (2) they enable the team to establish direct communications with the persons, organization, or company making the request, with the relevant USAID mis-

sion personnel, and with both private sector and government personnel involved in the activities and/or issues to be addressed; and (3) they provide SUSTAIN with the opportunity to develop a plan of action for follow-up activities. A listing of the assessments conducted by SUSTAIN is included in Table I.

Following the conclusion of each mission, the assessment team provides a written report, which SUSTAIN management then forwards to the appropriate USAID offices and missions. The reports of these assessment mission reports, as well as SUSTAIN's quarterly reports, contain information on the operations, conclusions and recommendations of the assessment teams. All of these reports will be made available to the evaluation team.

Technical Consultations -- If an assessment mission identifies a need for further assistance, to the extent possible, SUSTAIN arranges for technical consultants to address specific specialized problems. The technical consultants, most often individuals or a two-person team, work with the beneficiaries on the particular areas identified during the assessment missions. A listing of the technical consultations and the type of assistance provided is included in Table I. Copies of the reports of each consultation will be made available to the evaluation team.

The technical consultations are directed at making a long-term impact on beneficiaries. This may consist of the introduction of new information and technologies that will contribute to improved nutrition and food safety, the development of improved operational and management systems in the assisted industries, and/or economic improvements as a result of more efficient procedures and techniques. Such information and the utilization of the improved technology is transferred through demonstration, individualized on-the-job training, and group instruction.

Workshops -- In some instances, the issues identified through the assessment missions and technical field consultations are sufficiently important that they need to be addressed in terms of a broader constituency. In these cases, they become subjects for industry-wide workshops or seminars. Usually, these broader activities are undertaken in close collaboration with the original requesting organization, or arranged under the auspices of a government agency or private sector association. SUSTAIN staff and volunteers organize the content of the workshops in conjunction with local groups and USAID Missions and serve as the principal leaders. SUSTAIN volunteers contribute significant time and effort towards designing instructional materials for the workshops. These "hands-on" workshops often incorporate laboratory and group problem-solving exercises and give workshop participants the opportunity to learn how to apply new technologies and quality assurance systems.

Workshop topics have included processing and preserving tech-

niques; post-harvest handling; quality control; food safety; food packaging and labeling; and marketing. A listing of workshops is included in Table I, and written reports of each workshop will be provided to the evaluators.

2. Home Office Activities

SUSTAIN Headquarters operates as a liaison between USAID missions, USAID/Washington, recipients of assistance, and volunteers to clarify and assess the needs, design assistance activities, select volunteer experts and task the project team to provide technical assistance, training and/or needs assessments. After the completion of the field assignment, headquarters coordinates preparation of report and works with the volunteer, USAID, and the recipients to build consensus about any necessary follow-on activities. SUSTAIN headquarters supports the activities of its steering committee which meets quarterly as well as specialized committees as appointed by the SUSTAIN Chair. Steering Committee members and their sponsoring corporations contribute significant time and expense to participate in these meetings and other SUSTAIN activities.

In addition to coordination with missions, workshops, and governance, the SUSTAIN headquarters office provides a number of informational activities that are designed to contribute to the accomplishment of the organization's overall mission. These include publications, activity reports, the coordination of specific types of activities required by the field teams, and the expansion of the SUSTAIN volunteer base. Since the inception of this project, management has continually searched out new expertise and expanded the involvement of U.S. companies, other federal agencies, and multi-lateral institutions in the program. This has involved outreach through speeches, symposia, forums, articles, one-on-one meetings, seminars, receptions, and other events. SUSTAIN has also been invited to participate in providing feedback on the effectiveness of U.S. development assistance programs in food and agriculture.

The extent to which the SUSTAIN network has grown, and the expansion of the areas of its volunteer expertise, now enables the organization to offer new and expanded services in such fields as nutrient composition; fortification; quality assurance; hygiene, sanitation, good manufacturing practices, and Hazard Analysis Critical Control Points (HACCP); sensory evaluation; product commercialization and marketing; turn-around business assessments; essential oils and waxes; and organic food crop production certification.

Publications and Technical Materials Dissemination -- "SUSTAIN NOTES", a periodic publication dealing with directly relevant technical issues in the food industry is SUSTAIN's basic informational tool and is provided to a mailing list of more than

2,000 organizations, individuals and agencies. Articles for the publication are contributed by professionals in the U.S. food industry, university faculty, officers of international organizations, as well as persons in the assisted countries. "SUSTAIN NOTES" has had an important impact and has served as a means of informing and educating a wide range of persons involved in developing country food industries. In addition, it has sparked a growing interest in the services of SUSTAIN and generated an increasing number of requests for assistance. Copies of "SUSTAIN NOTES" will be made available to the evaluation team. In addition to technical information conveyed in SUSTAIN Notes, SUSTAIN staff and volunteers respond to written requests for advice and informational materials on technical matters related to food processing.

Other publications of the SUSTAIN home office include the activity reports on all overseas activities (assessment missions, technical consultations, workshops); quarterly activity and finance reports; and annual progress reports. The reports of all field missions and workshops are reviewed and, after clarification of any issues or problems, put into the SUSTAIN reporting format and forwarded to the appropriate offices of USAID, the assisted companies and organizations in the developing country, and Steering Committee officers. SUSTAIN's annual progress and activity reports summarize project activities for the year and provides details on assessment missions, technical consultations and training programs.

II. EVALUATION OBJECTIVES AND METHODOLOGY

The evaluation is expected to serve as a guide for future planning and contribute to USAID's understanding of the scope and quality of SUSTAIN's activities. As well, it will assist USAID officers in assessing the value of the program and whether it merits an expansion of the scope of its activities. For SUSTAIN management, the evaluation will serve to document "lessons learned", and the recommendations of the team will be a useful tool for assessing the need for any modifications necessary in the design and implementation of the project.

A. Objectives

The overall objective of the assignment is to evaluate the ongoing SUSTAIN project as to its design, implementation, achievements, effectiveness and impact. In making these assessments, it should be kept in mind that, from the outset, it was intended that the structure and operations of the project, as well as the application of project resources, should be sufficiently flexible to allow SUSTAIN to respond to new opportunities and changing circumstances. Accordingly, several aspects of the project design have been substantially modified during implementation in response to changing conditions, new opportunities, and newly

identified needs.

The specific objectives of the evaluation mission are to:

- (1) **Report on the status of project implementation** -- Taking into consideration the project's need for flexibility and responsiveness, the team should compare actual implementation to the activities outlined in the original project design, and determine the extent to which the objectives have been met.
- (2) **Evaluate the performance and efficiency of the implementation**, including an examination of both the process of implementation and its impact on the targeted beneficiaries.
- (3) **Recommend measures** to improve the effectiveness and impact of the project, and propose any necessary modifications to the project's design and focus.

In examining both the project concept and its performance, the key criteria should be relevancy, effectiveness and efficiency. In identifying the differences between the anticipated and actual achievements, the evaluation should examine both the intended and unintended results, as well as the direct and indirect impacts of project activities.

B. Evaluation Methodology/Procedures

Although the team will develop its own approach to conduct the research required for the evaluation, the following methodology is suggested:

- (1) Briefings by SUSTAIN management and a review of relevant documentation. This will take place in Washington, DC.
- (2) Interviews with relevant project personnel, members of the Steering Committee, officers of USAID, and personnel of U.S. businesses involved in the program. Many of these interviews may be conducted by telephone.
- (3) Visits to project sites; interviews of representatives of the companies assisted under the project. Due to the wide geographical distribution of the project's activities, it is suggested that field visits be limited to Central America.
- (4) Review of the technical reports and other documentation on project activities.
- (5) Preparation of a preliminary evaluation report for review/discussion by SUSTAIN and USAID.

- (6) Discussions of preliminary conclusions and summary findings with SUSTAIN management and USAID officers.
- (7) Review of feedback on the preliminary report and preparation of a final document.

SUSTAIN will actively collaborate with the evaluation team at all stages of the evaluation, and will make available to the evaluators all relevant documentation, facilitate access to project sites, and access to relevant industry volunteer consultants, members of the Steering Committee and staff of beneficiary enterprises.

C. The Evaluation Report

While the team members will determine the organization of the final evaluation report, a suggested outline is provided for consideration in Annex A.

D. Team Composition and Schedule

It is anticipated that the evaluation team will be composed of two persons, one of whom will serve as the team leader. Both team members will prepare sections of the final report.

Team Leader -- A specialist with experience in the planning and development of projects of a similar nature.

Food Industry Specialist -- A specialist from the private sector with extensive, hands-on experience in the food industry. This team member will collaborate with the lead evaluator in the development of the evaluation work plan and the delineation of individual responsibilities.

E. Duration

Two days at SUSTAIN headquarters in Washington, DC for briefings and document review prior to the personal, face-to-face interviews, telephone interviews and field visits; 5 working days in Washington conducting the interviews; 5 days of field visits; 12 working days of report writing (4 days for the draft report, 6 days for the final draft, 2 days completing final report); 1 day for verbal presentation; 2 days for international travel; 3 days for travel within the U.S. Total of 30 working days @ 6 days/week.

F. Report Preparation

A summary draft report will be completed for review and presentation to project management and USAID.

The final report should be completed and submitted to USAID

by the closing date established by the USAID officer in charge. A diskette containing the report should be submitted along with the printed document.

G. Remuneration

The evaluation will be financed by USAID/ Washington. The consultants may request an advance to cover travel expenses and per diem. Payment of the consulting fees will be made after the submission and acceptance of the final report.

Annex A
Suggested Organization and
Contents of the Evaluation Report

Structure of the Evaluation Report

Executive Summary (up to 4 pages)

- background (pre-project situation);
- brief summary of project (essence);
- summary of findings (assessment of design, results achieved);
- lessons learned;
- summary of recommendations.

I. DESCRIPTION OF THE PROJECT

- A. Background
 - pre-project situation;
 - rationale for project concept.
- B. Overview of the Project
 - goal, purpose, intended objectives and intended outputs;
 - organization, management, institutional structure;
 - project cost and financing, and project inputs, staffing.
- C. Description of Specific Project Components
- D. Current Status of the Project
 - review current activities.
 - review SUSTAIN management, technical assistance.
 - actual results achieved

II. PROJECT ANALYSIS

- A. Assessment of the Concept and Design
 - appropriateness, strengths, weaknesses;
 - assessment of project strategy and priorities established by management;
- B. Implementation Performance
 - assessment of provision and quality of inputs (funding, equipment, personnel);
 - assessment of technical assistance, training, advisory services
 - assessment of project monitoring and reporting.
- C. Project Impact
 - changes resulting from the project;
 - effect on beneficiaries
 - domestic and international activities;
- D. Project Effectiveness and Relevance
 - relation to USAID priorities;
 - comment on project's benefits to local economies and societies

III. CRITICAL ISSUES

- A. Benefits to targeted enterprises;
- B. Management and staff capacities;
- C. Expansion of scope of SUSTAIN activity.

IV. CONCLUSIONS AND RECOMMENDATIONS

(Summarize findings. Based on the findings, identify the means for improving the effectiveness, efficiency and impact of the project).

Annex B

List of Individuals Interviewed

List of Individuals Interviewed

USAID Washington

Name	Affiliation
Sam Kahn	G/PHN/HN/NMH
Rudolph Vigil	AFR/SD/PSGE
Ellyn Ogden	LAC/RSD-PHN
John Becker	LAC/SRD-BBEG
John McMahon	LAC/RSD-E
Ronald Stryker	G/EG/AFS/AEMD
Dennis Panther	G/EG/AFS/AEMD
Jerry Brown	AFR/SD/PSGE
Kelly Kammerer	A/AID
Ann Van Dusen	G/AA
David Oot	G/PHN/HN
Jim Heiby	G/PHN/HN/PSR
Francesca Nelson	BHR/PPE

SUSTAIN

Name	Affiliation
Elizabeth Turner	SUSTAIN Staff
Teri Volpe	Steering Committee
Bud Denton	Steering Committee
John H. Nelson	Steering Committee
Damien Gabis	Steering Committee
Daniel Friedrich	Steering Committee
Mary Wagner	Steering Committee
Paul Mulcahy	Steering Committee
Donald Lindeman	Volunteer
George Lutz	Volunteer
Roy Shaw	Volunteer
Pedro Sole	Volunteer
Robert Miller	Volunteer

Guatemala

Name	Affiliation
Ing. Jorge Escobar	PROFRUTA
Ing. Mario Ivic	COPASA
Lic. Alberto Garita	Molinos Modernos
Dr. Carlos Roel Marroquin Aldana	DIGESEPE
Luis Elias	INCAP
Magda Fisher	INCAP
Omar Dary	INCAP
Carlos Rafael Anzueto	OSMOSIS and AGTA
Luis Alfredo Garcia	Alimentos Kern and AGTA
Luz Marie Ortega	New Zealand Mild Products and AGTA President
Jorge Chang	USAID/HN

El Salvador

Name	Organization
Lic. Zuly E. Gonzalez Z.	FUSADES
Dra. Luisa Margarita de Mejia	FUSADES
Lic. Oscar Gutierrez	Minister of Agriculture
Lic. Luis E. Nuila	ENA
Lic. Nestor Adrian Rodriguez Larin	ENA
Ing. Nelson	ENA
Ing. Nuila	ENA
Ing. Flamenco	ENA
Ing. Mario Monroy	UCRAPROBEX
Lic. Nestor Ulises Palma	UCRAPROBEX
Steve Koehn	CLUSA
Samuel Salazar	CLUSA
Enrique Moran	CLUSA
Jesus Constanza	CLUSA
Meri Sinnitt	USAID
Gordon Straub	USAID
David Gardella	USAID

Annex C

SUSTAIN Activities by Fiscal Year

SUSTAIN ACTIVITIES IN FISCAL YEAR 1992

Location/Date		Mission/Workshop Topic	SUSTAIN Volunteer (s)	Other
Nigeria October '91	A	Low Cost Weaning Foods in Nigeria Assess the opportunities and constraints associated with several private sector firms entering the market for low-cost weaning foods	2	
Guatemala January-February '92	A	Needs Assessment for INCAP - Industrial Capacity Building Assess INCAP's (Institute of Nutrition of Central America and Panama) institutional capacity to work with the private sector to address food & nutrition challenges; identify needs for SUSTAIN assistance to strengthen INCAP's capacity to provide technical assistance and training to food processors in Central America	2	1 staff
Guatemala March '92	A	Program Planning with INCAP Assess private sector demand for (a) training and technical assistance in food processing technology, quality assurance & food safety, (b) laboratory series, (c) product development & nutrient enhancement assistance through round table forums with representatives from local food industry, government, academia, research and scientific organizations, laboratories, and trade and export associations		1 staff
Guatemala April '92	W	Seminar on Mycotoxins Seminar and technical assistance on low-cost methods to detect mycotoxins and to prevent adverse affects on human health and livestock quality	1	
Guatemala May '92	W	Organic Marketing Workshop Seminar on the marketing of organic products	1	
Honduras June '92	TA	Technical Assistance to Fabrica Industrial De Alimentos De Honduras Technical assistance in Good Manufacturing Practices (GMP) and the pickling of vegetables	1	
USA/Illinois June '92	PT	Participant Training Support Sponsored a participant from Uganda to take an INTSOY course on soybean processing at the University of Illinois and to attend meetings in Washington DC		1 participant from Uganda
Mexico July '92	TA	Technical Assistance in the Manufacturing of Goat Cheese Technical assistance in equipment sanitation, pasteurization, and processing of goat's milk into cheese	1	
Guatemala July '92	A	Pilot Plant Assessment Assess INCAP's pilot plant building and equipment and their potential for improvement	2	

SUSTAIN ACTIVITIES IN FISCAL YEAR 1992 CONTINUED

Guatemala August '92	W	Extrusion and Flavor Technologies Workshop and technical assistance in the application of extrusion and flavor technologies	2	1 staff
----- Honduras August '92	W		2	1 staff
Washington/ Boston June '92 August '92	A	Nigeria Weaning Foods Follow-up analysis and development of program strategy for launching the production of commercial weaning foods in Nigeria	1	2 staff
Hungary August '92	A	Incubator Feasibility Assessment Assess the feasibility of developing an agribusiness incubator in Hungary	1	
Guatemala September '92	W	INCAP 40th Anniversary Conference Presentations on product development, marketing, food fortification, and quality assurance in addressing food & nutritional needs in Central America	4	

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SUSTAIN ACTIVITIES IN FISCAL YEAR 1993

Location/Date		Mission/Workshop Topic	SUSTAIN Volunteer(s)	Other
Hungary November '92	A	Incubator Feasibility Assessment II Assess the feasibility of developing a agribusiness incubator in Hungary	1	
Nepal December '92	A	Feasibility of Establishing Commercial (Private Sector) Food Testing Laboratory Services Assess the feasibility of establishing a private food testing laboratory	1	1 staff 1 USAID advisor
Guatemala March '93	A	Food Industry Survey Survey of local food processors to identify specific needs for technical assistance and training that could be addressed collaboratively by SUSTAIN, INCAP, and AGTA (Guatemalan Association of Food Technologists)	1	
Barbados February '93	A	Business Assessment Financial and technological analysis of the Barbados Agro Processing Company	1	
Uganda March-April '93	A	Assessment Mission Assess technical assistance and training needs for the food processing sector through a series of meetings, roundtable forums, and tours	1	1 USAID advisor
Guatemala March '93	W	Training: Sensory Evaluation Short-course Short course for professionals from the food industry in Central America to train them in the correct use of sensory evaluation techniques and their application to product development and quality control	1	
Guatemala March-April '93	A	Plan QA/QC/GMP Short Course Series Assess food manufacturers' needs in quality assurance/control and GMP to determine design of "Training of Trainers " series of workshops and criteria for trainee participation	1	1 staff
Russia May '93	A	Technical Assessment Assess needs for technical assistance and training in food processing and marketing in the Tver Oblast (administrative district) of Russia		1 staff
Philippines May '93	W	Agricultural Products Quality Workshop Deliver technical presentations on organic marketing and certification requirements, food safety and quality assurance, fisheries, and spices and flour technologies to increase awareness and technical understanding of the issues and problems related to improving the quality of Asian products	4	1 staff

no

SUSTAIN ACTIVITIES IN FISCAL YEAR 1993 CONTINUED

Panama/ Wisconsin July '93	SE	Waste Handling/Utilization in Slaughter Houses Arranged for a group from ICAITI (Instituto Centroamericano de Investigacion y Tecnologia Industrial) to see and discuss methods of waste handling in slaughter houses for purposes of pollution prevention and waste byproduct utilization	1	
USA July '93	PT	Participant Training Training in food technologies for a representative from the Uganda Manufacturers Association, including seminars on information management systems, attendance at the IFT Annual Meeting, and tours of U.S. food manufacturing plants		1 participant from Uganda
Guatemala August '93	W	Training: QA/QC Short-course "Training of Trainers" Training of quality assurance personnel to be trainers in the fields of good manufacturing practices, plant sanitation, and hygiene for line workers and technicians	3	
Guatemala August '93	A	Nutritionally Fortified School Cookie Program and Commercial Feasibility of a Vitamin-A rich Sweet Potato Cereal for Children Assess process and quality control practices of local bakeries manufacturing a nutritionally fortified cookie, assess the commercial feasibility of a vitamin A rich children's cereal, and identify training needs for local bakeries	1	
Belize August '93	A	Assessment Mission to Belize Evaluate two nongovernmental organizations' capability to assist in the development and diversification of their food-related clients; done in conjunction with the micro-enterprise division of the Inter-American Development Bank	2	1 staff
Uganda August '93	W	Workshop and Technical Assistance: Packaging Workshop and individualized technical assistance to local organizations and food processors	1	
Burkina Faso August-site visits September '93	TA	Technical Assistance: Corn Milling Advise on improvement of the quality of dry milled corn product, including questioning users of the finished product	1	
Burkina Faso August-site visits September '93	TA	Technical Assistance: Potato Storage Advise on ways to improve the storage life of potatoes through visits to local potato storage facilities	1	

SUSTAIN ACTIVITIES IN FISCAL YEAR 1994

Location/Date		Mission/Workshop Topic	SUSTAIN Volunteer(s)	Other
Cameroon October '93	A	Agricultural Research & Development Identify options for restructuring agriculture research and extension institutions to better address problems and needs of small and medium sized food businesses	2	
Guatemala October '93	W	Food Safety & Quality Control III Assist local groups in design, delivery, and evaluation of workshop on sanitation, good manufacturing practices, and quality control	3	
South Pacific/ Fiji November '93	TA	Organic Production & Marketing Technical assistance with organic production, certification requirements, inspection, and marketing	1	
Guatemala November '93	W	Sensory Evaluation II Workshop on laboratory techniques and statistics to evaluate consumer acceptance and preference of food products	1	
Uganda November '93	W	Marketing & Quality Control Workshop on principles of marketing food products, good manufacturing practices, and quality assurance	2	
El Salvador December '93	TA	Organic Coffee Processing I Technical assistance in roasting, grinding, packaging, and quality control for organic coffee	1	
Burkina Faso January '94	TA	Potato Storage II Design and construction of potato storage facility	1	
Guatemala Jan/Feb '94	W	Bakery I Workshop on baking techniques, ingredient functionality, equipment and plant maintenance, and quality control	1	
Guatemala April '94	W	Sensory Evaluation III Workshop on laboratory techniques and statistics to evaluate consumer acceptance and preference of food products	1	
Guatemala April '94	W	Guatemalan Association of Food Technologists (AGTA) Congress Presentations on global food market trends, pesticide residue and export regulations, Hazard Analysis Critical Control Points (HACCP), and total quality management	4	1 staff
Indonesia July '94	TA	Flour Milling & Fortification Technical assistance with plant design and milling techniques for high-protein, low-ash bread flour	1	

SUSTAIN ACTIVITIES IN FISCAL YEAR 1994 *CONTINUED*

Guatemala July '94	W	Fruits & Vegetables Processing Workshop on preservation techniques, quality control, and canning regulations for plant managers, supervisors, and technicians	1	
Honduras July '94	W	Food Safety & Quality Control Workshop on good manufacturing practices, basic plant sanitation, and quality control	3	
Guatemala August '94	W	Marketing Workshop on the fundamentals of marketing on a small budget, including consumer trend analysis, why new products fail, packaging, pricing, advertising, and promotion	2	
Zambia September '94	W	Essential Oils, Flavors, Spices, & Natural Ingredients Workshop on the preservation, packaging, marketing strategies, international quality specifications, small business development, and value-added products	3	
El Salvador September '94	TA	Organic Coffee Processing II Technical assistance in roasting, grinding, packaging, equipment installation, quality control, and distribution for organic coffee	1	

SUSTAIN ACTIVITIES IN FISCAL YEAR 1995

Location/Date		Mission/Workshop Topic	SUSTAIN Volunteer(s)	Other
Guatemala November '94	W	Hazard Analysis Critical Control Points Workshop on the importance, principles, and implementation of Hazard Analysis Critical Control Point (HACCP) as a means of ensuring food safety	2	
El Salvador January '95	A	Seafood Production and Processing Assess condition, value, and turnaround potential of fishing fleet and processing equipment of a fishery cooperative	2	
Nepal Jan/Feb '95	A	Dairy Processing: Quality Control on-Farm and Processing Assess options to improve milk quality, diversify processing technologies, and improve packaging, storage, and handling	1	
Russia Jan/Feb '95	W	Dairy Product Development Workshop and technical assistance in dairy product development, diversification, and quality control	1	
Guatemala March '95	W	Bakery Technologies & Quality Control II Workshop on baking techniques, ingredient functionality, equipment and plant maintenance, and quality control	1	
Washington, DC April '95	SE	USAID/Africa Bureau Collaborators Workshop Participate in workshop with individuals from African universities, businesses, and governments to evaluate, prioritize, and plan USAID private sector development objectives and activities in sub-Saharan Africa.	5	1 staff
Indonesia May '95	TA	Organic Coffee I Technical assistance in roasting, grinding, packaging, equipment needs for processing, marketing, and distribution of organic coffee	1	
Washington, DC Anaheim, CA May-June '95	SE	Participant Training - Uganda & Madagascar USAID/AFR/PSG&E and SUSTAIN hosted the Director of the Ugandan Bureau of Standards and the Manager of AFABI, a company in Madagascar, at the 1995 Annual Meeting of the Institute of Food Technologists. SUSTAIN also organized informational meetings for the Ugandan participant in Washington, D.C. with organizations including the National Food Processors Association, the U.S. Department of Agriculture, and the Food and Drug Administration.	5	

SUSTAIN ACTIVITIES IN FISCAL YEAR 1995 *CONTINUED*

<p>Anaheim, CA SE June '95</p>	<p>Forum SUSTAIN sponsored a Forum at the IFT 1995 Annual Meeting entitled "Food Safety and Quality Challenges in Emerging Markets: Sharing the Means to Address Barriers and Opportunities." Speakers were from the U.N. Food & Agriculture Office, a Guatemalan food processing company, the U.S. Department of Agriculture, USAID, H.J. Heinz, and the U.S. Food & Drug Administration.</p>	<p>3</p>	<p>1 staff 1 USAID advisor 1 FAO 1 USDA 1 FDA</p>
<p>Russia W June '95</p>	<p>Marketing Workshop on the fundamentals of marketing, including 'consumer trend analysis, packaging, pricing, advertising, and promotion</p>	<p>2</p>	
<p>Honduras W August '95</p>	<p>Fruits & Vegetables Processing Workshop on preservation techniques, quality control, and canning regulations for plant managers, supervisors, and technicians</p>	<p>1</p>	
<p>Russia (Tver Oblast) W September '95</p>	<p>Dairy Processing II Follow-up workshop and further technical assistance in dairy product processing, production, packaging, and marketing</p>	<p>1</p>	
<p>Guatemala W September '95</p>	<p>INCAP Anniversary Conference Presentation on "Globalizing Trade & Nutrition: Opportunities to Improve the Diet of Central American Populations"</p>	<p>1</p>	
<p>Guatemala A September '95</p>	<p>Bakery Technologies & Low-Cost, Fortified Foods Building on previous SUSTAIN training, gathered input from private and public sectors for design of modular series of workshops & technical assistance for small and medium-sized bakeries</p>	<p>1</p>	<p>1 staff</p>
<p>Guatemala A September '95</p>	<p>Food Safety & Quality Assurance Building on previous SUSTAIN training, gathered input from private and public sectors for design of modular series of workshops & technical assistance in hygiene, plant sanitation, Good</p>	<p>1</p>	<p>1 staff</p>
<p>----- El Salvador A September '95</p>	<p>Manufacturing Practices, Quality Assurance, & HACCP</p>	<p>----- 1</p>	<p>----- 1 staff</p>

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SUSTAIN ACTIVITIES IN FISCAL YEAR 1996

Location/Date	Mission/Workshop Topic	SUSTAIN Volunteer(s)	Other
U.S. SE October-November '95	USAID/Africa Bureau Trade and Investment Promotion Advisors Workshop Participate in workshop for individuals from African municipal, regional, and national governments who promote trade and investment through technical assistance to small and medium-sized businesses. Volunteers covered topics including food processing technologies, marketing, and natural products.	2	
U.S. SE November '95	Visit of Russian Dairy Personnel to U.S. Facilities Personnel from two Russian dairies visited U.S. dairy and packaging plants; they were hosted by SUSTAIN volunteer Jim DeTolla	1	
Guatemala W December '95	Fruits & Vegetables Processing Workshop on preservation techniques, quality control, and canning regulations for plant managers, supervisors, and technicians as requested by PROFRUTA	1	
El Salvador TA February '96	Organic Coffee Processing III Technical assistance to advise on expansion of organic coffee processing operation; follow-on to previous assignments	1	
El Salvador W March '96	Cheese Processing Workshop at ENA on general principles of cheese processing, specialty cheeses, and hygiene and sanitation	1	
India W March '96	Seafood HACCP Workshops on near-term U.S. market trends for fishery products and practical information on importing fishery products into the U.S. under the new FDA regulations for seafood HACCP. Directed to Asian seafood processors, exporters, and other interested organizations	2	
The Philippines W March '96		2	
Indonesia W March '96		2	

A - Assessment, TA = Technical Assistance, W = Workshop, PT = Participant Training, SE = Special Event

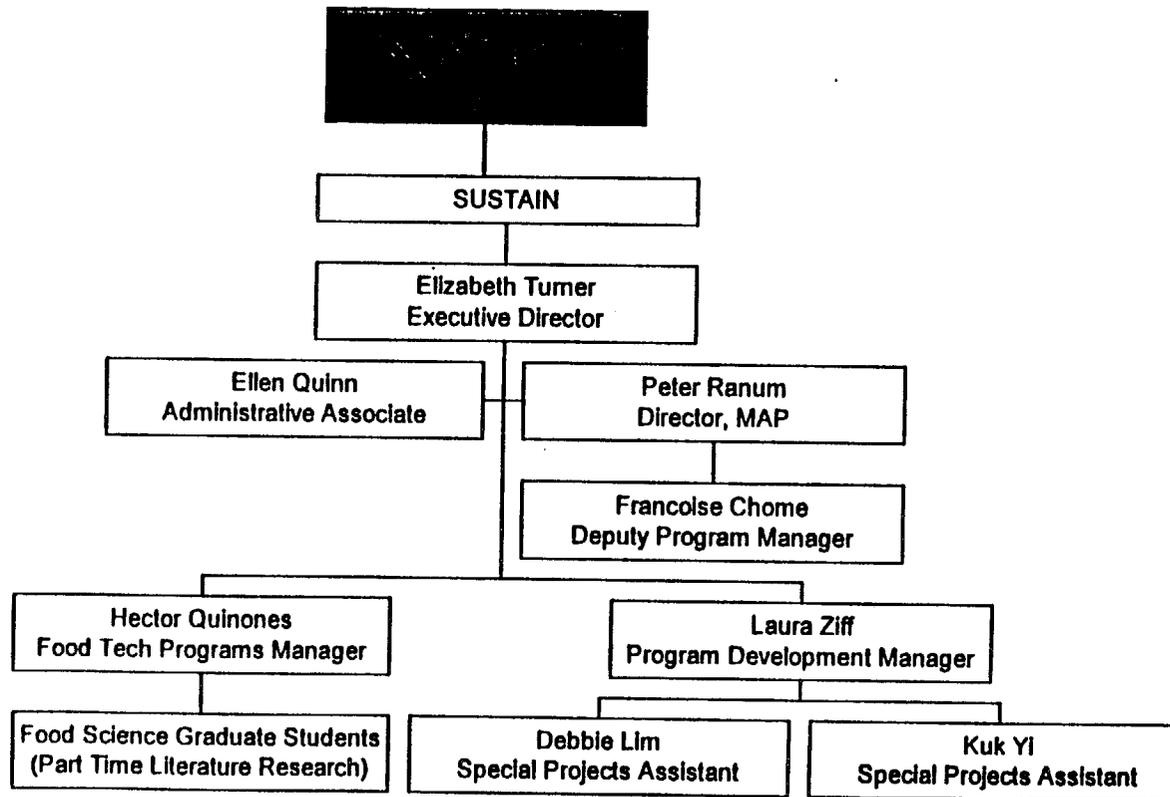
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Annex D

SUSTAIN Organizational Chart

SUSTAIN Organizational Chart

April, 1996



Annex E

List of Organizations and Volunteer Expertise

COMPANIES REPRESENTED BY SUSTAIN VOLUNTEERS

ABC Research Corporation
African Agricultural Systems, Inc.
AgriSystems International
American Home Foods
American Ingredients
Analytech Associates
Appropriate Technology Transfer to Rural Areas
Association of Amer. Veterinary Medical Colleges
Autumn Harp
BDM Enterprises
Bar N.A., Inc.
Battelle
Ben & Jerry's Homemade, Inc.
Borden, Inc.
Buehler, Inc.
Campbell Soup Company
Cargill Inc.
Chiquita Brands International
Coble Dairy Products, Inc.
The Coca-Cola Company
Colgate-Palmolive Company
ConAgra, Inc.
Conexion International, Ltd.
Corlett Food Consulting Service
Creative Market Development, Inc.
Custom Food Machinery
Dean Dairy Products Company
Del Monte Foods
Dixie Dew Products
Dole Food Company, Inc.
Elan Organic Coffees
Energy Associates International
Florida Food Products, Inc.
Food Consultants International
Food Paradigms Corp.
General Foods Corp.
Gerber Products Company
Gorton's
H.J. Heinz Company
Hershey Foods Corp.
Hunt-Wesson, Inc.
Industrial Market Research International
International Canning Services, Inc.
International Marine Fisheries Company
Jen-Tech Enterprises
KFC Corporation
Kellogg Company (Latin America)

Kraft Foods, Inc.
Land O'Lakes, Inc.
LaRocca Science Laboratories, Inc.
Malt O'Meal Company
Mars, Inc.
McCormick & Company, Inc.
Meridian Products
Nabisco Biscuit Company
National Food Processors Association
Nestle USA, Inc.
Nutralab, Inc.
Nutrimark Foods Ltd.
Ocean Pond Corporation
Ojai Organics, Inc.
Omega International Group
Ore-Ida Foods, Inc.
Packerland Packing Company, Inc.
Pan American Engineering & Equipment
Pfizer Inc.
The Pillsbury Company
Pillsbury International
Prairie Farms Dairy
Priz-Co, Inc.
Procter & Gamble Company
Profectus Management Group
Quest International
RMS International, Inc.
R.J. Reynolds Company
Rich Products Corporation
SRI International
Sea Resources Engineering, Inc.
John Sexton Co.
Silliker Laboratories Group, Inc.
Simons-Eastern Consultants, Inc.
J. R. Simplot Company
Star-Kist Seafood Company
The Walter Stern Consultancy, Ltd.
Stern International, Inc.
Stockton Cheese
Technical Assessment Systems, Inc
TechnoVation Network, Inc.
Universal Flavors International, Inc.
Universal Flavors (Philippines)
The Veritas Group
Vlasic Foods, Inc.
Wakefern Food Corporation

Areas of SUSTAIN Volunteer Expertise

Agronomy
Animal Nutrition
Bakery Technologies
Business Management/Finance
Candy/Confections
Canning/Thermal Processing
Coffee/Spices
Energy Conservation And Solar Technologies
Engineering
Environmental Technology
Extrusion
Fats & Oils
Fermentation
Flavors
Food Dehydration
Food Labeling
Food Policy & Regulation
Food Processing Equipment
Food Safety
Food Stabilizers And Thickeners
Fortification
Frozen Foods
Good Manufacturing Practices
HACCP
Infant/Weaning Foods
Integrated Pest Management
Lab Technologies
Marketing
Microbiology
Nutrition

Organic Certification And Inspection

Packaging

Pilot Plant Design/Inspection

Plant Hygiene/Sanitation

Post Harvest Storage

Processing - Cereals & Legumes

Processing - Dairy

Processing - Fish/Seafood

Processing - Fruits & Vegetables

Processing - General

Processing - Juices & Beverages

Processing - Meats/Poultry/Egg

Processing - Soy

Product Development

Quality Assurance/Control

Sensory Analysis/Evaluation

Starches & Carbohydrates

Waste Handling/Treatment/Pollution Prevention

Wholesale/Retail Distribution