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Partnerships for Food Industry Development – Fruits and Vegetables

USAID “ACCESS TO MARKETS PROGRAM” (AMP): A MODEL PROGRAM APPROACH

**Andrea M. Allen, PFID-F&V/East Lansing
Michael Richards, Fundación AGIL**

**Michigan State University
Room 409 Agriculture Hall
East Lansing, MI 48824**

**Telephone: 517 432 2214
Fax: 517 353 5149
Email: allenan9@msu.edu
Web: <http://www.pfid.msu.edu>**

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List of Acronyms and Abbreviations

AGIL – *Apoyo para la Generacion de Ingreso Local*
ALIAR -- *Alianza para el Desarrollo Agriointustrial y Artesanal Rural*
AMP – Access to Markets Program
APAC/PNT -- *Asociación de Pequeños Agricultores Comalapenses de Productos no Tradicionales*
BID/FOMIN – *Banco Inter-Americano del Desarrollo/ Fondo Multinacional de Inversiones*
CAM – Central America and Mexico Program (new USAID acronym for their regional program)
CAP – Central America Program (old USAID acronym for their regional program)
CAPGAP – Central American Produce Good Agricultural Practices
CARHCO – Central American Retail Holding Company
CFR – Codes of the Federal Register
COP – Chief of Party
CTO – Cognizant Technical Officer
EG – Economic Growth
EGAT – Economic Growth, Agriculture and Trade Division
EPA – Environmental Protection Agency
EurepGAP – Euro-Retailer Produce Working Group Good Agricultural Practices
FDA – Food and Drug Administration
FIS – *Fondo de Inversion Social*
GAP – Good Agricultural Practices
GBP – Good Business Practices
G-CAP – Guatemala – Central America Program (the USAID CAP program was previously located in Guatemala)
GMP – Good Manufacturing Practices
GOG – Government of Guatemala
ICT – Information and Communication Technology
MAGA – *Ministerio de Agricultura, Ganaderia y Alimentacion*
MSU – Michigan State University
PAM – *Programa de Acceso a Mercados* (Spanish acronym for Access to Markets Program – AMP)
PFID – Partnerships for Food Industry Development
PFID-F&V – Partnerships for Food Industry Development – Fruits and Vegetables
PIPAA -- *Programa Integral de Protección Agrícola y Ambiental*
PMA – Produce Marketing Association\
S.A. – *Sociedad Anonima*
SOW – Scope of Work
SPS – Sanitary and Phytosanitary Standards
TA – Technical Assistance
USAID – United States Agency for International Development
USDA – United States Department of Agriculture

Executive Summary

Background. One of the major hindrances to increased income generation among Guatemalan agricultural producers is limited access to reliable, higher value markets. Aside from traditional problems of inefficient production practices and lack of knowledge of diversified products, there is often a communication or information gap between what a farmer produces and what the market demands. Given the new and increasing emphasis on food safety and quality, this gap is widening. If small and medium sized farmers are not able to implement Good Agricultural Practices (GAPs) in the short run, they will be forced to sell their produce directly to traditional markets, i.e. through intermediaries, or simply drop out. Farmers must be exposed to the changing “rules” – the new food safety standards – and then decide for themselves if they are willing to make the investment to have access to the new, more demanding more profitable markets.

In response to this situation, the USAID supported PFID-F&V/Central America “Access to Market Program” (AMP) has worked with producer groups in Guatemala to promote: 1) a stronger Guatemalan system for verification of GAP compliance through PIPAA (the official verification agency); and 2) better market access and increased income earning opportunities for small and medium size farmers.

In recognition of the value of this highly innovative and effective program, USAID/EGAT believes it important to completely document the approach in a format that can be used as a resource for subsequent activities, including those supported by USAID or other donors. As such, MSU PFID-F&V was charged with this task, and this document is presented as the result of this assignment (see Annex A for the Scope of Work).

The USAID/G-CAP “Access to Markets Program” (AMP) has been implemented in Guatemala, Nicaragua and El Salvador by MSU via a subagreement with the Fundación AGIL and in partnership with the Program for Integral Protection of Agriculture and the Environment (PIPAA), a public-private entity associated with the Government of Guatemala’s Ministry of Agriculture, Livestock and Food (MAGA) that verifies compliance for specific market export standards.

Now in 2006, as AMP nears the completion of its project cycle, program results are clearly impressive. Of primary importance has been the development and implementation of a formal Quality Assurance program. This program consists of: a modified Good Agricultural Practices program based on EurepGAP and FDA standards that more closely fit the reality of Central America called CAPGAP; a Good Post Harvest Practices program; a unique Good Business Practices program (developed in-house); a specific assistance package in production and marketing, and the installation of model GAP farms (called “window display” farms in Nicaragua). As a result of implementing the AMP model program:

- Thirty-six producer groups in Guatemala, seven in El Salvador, and seven in Nicaragua have participated in this program.
- Since January 2005, over 11 million pounds of vegetables (peas, beans, mini squash) produced by farmers who are implementing the Good Agricultural practices program, have been sold in European, US and regional markets with a combined value of over \$4.3 million.
- During this time over 320,000 daily jobs and over 100 permanent positions have been generated.
- A website with information on Sanitary and Phytosanitary concerns (SPS) in the region (www.msfinfo.com) was developed to help producers with Food Safety and export issues. Since September 2005, the site has received over 19,000 hits from 28 countries and an average of 120 hits per day – the site is now also in English.
- In a marketing visit to Europe, the buyers expressed surprise that the Guatemalan producers were implementing Good Agricultural Practices and promptly placed orders for product. Since late March, sales for two months to Europe have been over \$55,000, with an increase of over 30% returned back to growers.
- During a recent trip to mainland China, it was quite apparent that Central America growers participating in the Quality Assurance program are “light years” ahead of their Chinese counterparts regarding Food Safety – a huge marketing advantage in Europe and the United States.

Technical components. The AMP approach to the technical challenges experienced by small farmers in accessing emerging markets involves a tightly structured yet flexible set of technical components. By following through with the systematic implementation of the programmatic steps to each component, producers and technicians work together to identify and address key constraints and opportunities throughout the value chain.

The specific technical components involved in the AMP approach include:

- Support for development of CAPGAP standards – Involvement in the development, application and evaluation of GAP standards in a variety of settings;
- Ongoing technical assistance for marketing and production – Provision of technical assistance as a cross-cutting component, i.e. across all program areas;
- Good business practices (GBP) – Building capacity to establish an official producer organization and in general business administration thereafter;
- Good agricultural practices (GAP) – Building capacity in CAPGAP standards, including adoption in producers’ own fields;
- Good post harvest practices – Emphasizing the end stages of Good Agricultural Practices, including harvesting, sorting and grading, storage, cooling and minimal packing considerations; and
- Potentially a revolving fund for provision of essential small infrastructure or equipment needs.

Concerning the revolving fund, this is an optional component that may be useful to address pressing equipment and infrastructural constraints to improved production and marketing performance. In the case of the AMP activity in Central America, additional funding was made available to address basic equipment needs, e.g. water filters, etc. In

addition, efforts were made to bring in outside funding (e.g. FIS) to address important infrastructural constraints, e.g. irrigation systems, etc.

Implementation approach. The other essential part of the AMP model needing to be addressed involves the programmatic approach to implementing the aforementioned technical components. Aspects to consider in this respect include:

- Choice of partnerships – Organizational partners should represent key transaction partners and stakeholders throughout the value chain;
- Staffing and related considerations – Staff should include a mix of agronomic and social scientists and rely on professionals and technicians with a fieldwork orientation and knowledge of rural and/or indigenous culture and practice;
- Work planning and timelines – Components should be phased in as a sequence of related activities;
- Cultural appropriateness – The design of training approaches and materials should take local culture into consideration;
- Sustainability – Both financial and environmental sustainability must be built into the design of the program from its beginning; and
- Performance measurement – Performance of the AMP model program was measured by indicators related to strengthened business operations, increased sales in general and of certified products in particular, employment generated and hectares cultivated under GAP methods.

Next steps. In the future, both Fundación AGIL and MSU plan to develop the AMP model further in the following ways. Fundación AGIL will work toward a number of elaborations on the AMP model program via its newly awarded Cooperative Agreement from USAID Guatemala. New activities will involve: 1) inclusion of new certifications; 2) addition of processing steps; and 3) improved supply chain logistics, among other possibilities. Michigan State University will also work toward refinement of the AMP model, with an emphasis on: 1) amplified support to developing value added processes through increased involvement of university faculty in research, development and technical assistance (re: market intelligence, packaging, marketing, food safety, etc.); 2) a strengthened gender inclusive approach; and 3) increased outreach to educational institutions to build their program curricula and teaching capacity in areas related to the F&V supply chain.

In addition, USAID staff have noted several possibilities for future AMP program applications, including:

- Apply the AMP model to other countries in the region via collaboration with the new USAID regional program for Central America and Mexico (CAM), now located in El Salvador.
- Consider development of a training module for USAID EG Officers, using the AMP model as a tool for developing program designs in a variety of contexts.
- Apply the AMP model to future USAID program designs and to improve existing programs, not only for fruit and vegetable marketing, but also for products such as coffee.

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USAID “ACCESS TO MARKETS PROGRAM” (AMP): A MODEL PROGRAM APPROACH

1. INTRODUCTION

1.1. PURPOSE OF THIS REPORT

One of the major hindrances to increased income generation among Guatemalan agricultural producers is limited access to reliable, higher value markets. Aside from traditional problems of inefficient production practices and lack of knowledge of diversified products, there is often a communication or information gap between what a farmer produces and what the market demands. Given the new and increasing emphasis on food safety and quality, this gap is widening. If small and medium sized farmers are not able to implement Good Agricultural Practices (GAPs) in the short run, they will be forced to sell their produce directly to traditional markets, i.e. through intermediaries, or simply drop out. Farmers must be exposed to the changing “rules” – the new food safety standards – and then decide for themselves if they are willing to make the investment to have access to the new, more demanding more profitable markets.

In response to this situation, the USAID supported PFID-F&V/Central America “Access to Market Program” (AMP) has worked with producer groups in Guatemala to promote: 1) a stronger Guatemalan system for verification of GAP compliance through PIPAA (the official verification agency); and 2) better market access and increased income earning opportunities for small and medium size farmers.

This program has now been under implementation for just over two years. During the last year of program implementation, the PFID-F&V/CAP approach has evolved to the next level by:

- Refining the ongoing program approach based on lessons learned in Phase 1;
- Locking in sustainability of results through an intensive capacity-building component; and
- Pilot testing the revised approach in Guatemala and its potential for application in additional Central America contexts as well as other regions.

In recognition of the value of this highly innovative and effective program, USAID/EGAT believes it important to completely document the approach in a format that can be used as a resource for subsequent activities, including those supported by USAID or other donors. As such, MSU PFID-F&V was charged with this task, and this document is presented as the result of this assignment (see Annex A for the Scope of Work).

1.2. METHODS & APPROACH

In order to document this approach, it was important to glean information from all available sources of data, including:

- **Document review** – Reports on program developments pre-PFID-F&V (Abt Associates reports), reports from PFID-F&V and follow-on work by Fundación Agil, among others (Annex B);
- **Stakeholder interviews** – PIPAA, La Fragua, producers organizations (3), key staff from Fundación Agil, PFID-F&V/CAP COP, USAID (Annex C);
- **Site visits** – Including Le Stansa, SA (5+ years with program); Asociación de Pequeños Agricultores Comalapenses de Productos no Tradicionales (APAC/PNT- 3 years with program); El Rincon Grande (1 year with program).

Based on the information collected from these sources, the following essential aspects of this model program design are reported herein, including:

- The collaborative process of developing this approach;
- A careful description of the activity components involved;
- Key implementation considerations needing to be addressed, i.e. those related to staffing pattern, work planning and timelines, etc.; and
- A final section providing information on plans for continued development of the program in a Central American context, with additional thoughts on future applications in other regions of the world as well.

2. A DEVELOPMENT STORY WORTH TELLING

2.1. OVERVIEW OF MODEL DEVELOPMENT

The USAID/G-CAP “Access to Markets Program” (AMP) has been implemented in Guatemala, Nicaragua and El Salvador by MSU via a subagreement with the Fundación AGIL and in partnership with the Program for Integral Protection of Agriculture and the Environment (PIPAA), a public-private entity associated with the Government of Guatemala’s Ministry of Agriculture, Livestock and Food (MAGA) that verifies compliance for specific market export standards.

The AMP Model, as it exists today, was actually developed over the period 2000-2006 via inputs from USAID/Guatemala’s “Proyecto AGIL”. The PFID-F&V work in recent years thus builds on an already innovative approach that had been implemented by Abt Associates, in collaboration with PIPAA and others, in their program to “Support Local Income Generation” (Apoyo para la Generacion del Ingreso Local; AGIL). In its most recent stage, MSU has provided the institutional infrastructure, overall program administration and technical leadership to supervise local staff and subgrant implementation, proactively promote alliance formation, strengthen and maintain partnerships among the various members, and provide outreach to Central America Regional markets. In addition, MSU facilitated development of Central America regional Central American Produce Good Agricultural Practices (CAPGAP) standards,

spearheaded Training of Trainers for GAP and EurepGAP, and developed and maintained the flagship website for food safety concerns for fruits and vegetables coming from Central America (<http://msfinfo.com/>). Finally, MSU also supplied research and development support that was not available from local sources, e.g. determining the best approach to package fresh vegetables supplied by program producers, and provided support for producer capacity building and market linkage development via hosting producer involvement at the annual trade show of the Produce Marketing Association.

Actual field implementation working with producer organizations, however, was provided solely by the Fundación AGIL. The Fundación AGIL model includes a credit package for developing the various program components, implementing the associated training modules, and providing a highly customized package of technical assistance to each of the participating producer organizations. Much of the advances with the producer groups stems from the Fundación AGIL model and implementation package, which, as mentioned, has roots in the earlier USAID Proyecto AGIL, executed by Abt Associates.

Finally, PIPAA provides oversight to the Fundación AGIL to assure that their programs and technicians are capable of implementing training programs in CAPGAP that comply with the PIPAA quality standards. PIPAA will not certify or judge implementation units, rather they will verify compliance with the CAPGAP of the producer groups; if the groups are not in compliance it will be up to the implementing units to make the necessary changes. PIPAA assures that technicians trained in CAPGAP meet a minimum set of standards and is setting up a clearing house of trained technicians who can act as third country inspectors (Hortifruti/Costa Rica technicians verifying compliance of La Fragua producers, for example.) As PIPAA takes on new tasks as they “ratchet up”, they will also need funding for higher level training for their staff.

2.2. THE EXAMPLE OF LESTANSA, SA

Back in 2000, producers living around Estancia de la Virgen all brought their produce to Supango individually. Green beans (*ijote*) were in especially high demand. Yet the producers around Estancia were not taking full advantage of the market situation, as they were losing significant amounts of money on duplicative transport costs and other inefficiencies. An early visit by Project AGIL technicians in that year resulted in an analysis and report on this issue to the area leadership, followed by a working session on how the producers might organize themselves to achieve the reduced costs envisioned by the AGIL plan.

The community of producers in Estancia deliberated on this issue for about one year. Of particular concern was the decision among the various legal organizational forms available and appropriate to this community’s economic and social situation – i.e. whether they should become a cooperative, an association, a corporation. They elected to become a corporation (*sociedad anonima*) – under the moniker “LeStansa, S.A.” Eighty-nine producers became shareholders at 200 Quetzales each. Today, these same 89 households remain the exclusive shareholders in this corporation, and the value of their

shares have risen to Q10,000 each. Furthermore, an additional 50-80 non-shareholding, producer households elect to sell their produce to LeStansa, S.A. on a regular basis.

One important asset that the producer households in the community of Estancia shared was a past history of organizational collaboration and discipline gained from civil defense experience in protecting the community from violence, as was all too often a way of life before the signing of the Peace Accords in 1996. This existence of a strong sense of community combined with an ample pool of leadership skills and experience has provided a fertile setting for the new and improved organization to prosper. Over the course of its five year organizational history, LeStansa, S.A. has evolved into a highly successful produce marketing business, with infrastructure extending beyond its warehouse and sorting facility, cold room and business office, on to a cold truck and subsequent linkage to cold chain transport from farm to supermarket. Additional corporate investments include a bakery, model greenhouse, and chicken corral. The company makes its own decisions on market transactions it considers advantageous and now uses Fundación AGIL support on an as-needed basis.

The LeStansa model received significant impetus when a buyer in the US requested more volume of the french bean product, as well as additional products. The AGIL project, using LeStansa as a model, expanded the development project to eventually include 20 producer organizations grouped together in an Alliance called ALIAR—Alianza Agroindustrial y Artesanal Rural (The Rural Agro-industrial and Artisan Alliance) Today, ALIAR, through LeStansa, annually exports over 5 million pounds of fruits and vegetables with a value of approximately \$4 million.

2.3. FUNDACIÓN AGIL

Once this earlier project was completed, key staff from Abt Associates moved on to establish Fundación AGIL, a non-profit organization dedicated to the provision of services to improve producer market access. The decision to form the foundation arose out of initial conversations among four AGIL members. An additional eight members were brought in, all well-known individuals with a long history of working relationships with the four from Project AGIL. Under Guatemalan law, to form a foundation, the founding members are required to make a personal monetary investment, so the 5,000 Quetzal incorporation fee from each represented a formidable commitment on the part of each. The legal paperwork took several months to process, but in the meantime, the members advanced with the goal and vision of establishing the administrative structure of the Foundation through a workshop held in Antigua just prior to the closing of the AGIL Project, in early December 2003.

The Mission and goal statements of Fundación AGIL basically reflect the philosophy of the tried and proven approach experimented in Project AGIL's work with small farmers—to assist small producers to organize themselves simultaneously with improvements in production standards and acquiring viable markets.

2.4. PFID-F&V CENTRAL AMERICA PARTNERSHIP

Michigan State University, via Tom Reardon and Rick Clark, developed the AMP proposal that was ultimately submitted to and funded by USAID/G-CAP. Earlier implementation by Abt Associates had resulted in a highly successful set of best practices that could be refined and enriched in later developments via Fundación AGIL and MSU. The current partnership includes stakeholders with interests throughout the value chain, i.e., producer associations, retailers, the GOG agency for food safety, a secondary level producer marketing organization, etc. Only Fundación AGIL, however, and, to a limited extent, MSU provide a sequence of services that can be targeted as needed throughout the value chain, from seed to table.

The funding from EGAT has allowed the existing F&V/CAP approach to evolve to the next level by:

- Refining the ongoing program approach based on lessons learned in Phase 1;
- Locking in sustainability of results through an intensive capacity-building component; and
- Pilot testing the revised approach in Guatemala and its potential for application in additional Central America contexts as well as other regions.

Now in 2006, as AMP nears the completion of its project cycle, program results are impressive. Of primary importance has been the development and implementation of a formal Quality Assurance program. This program consists of: a modified Good Agricultural Practices program based on EurepGAP and FDA standards that more closely fit the reality of Central America called CAPGAP; a Good Post Harvest Practices program; a unique Good Business Practices program (developed in-house); a specific assistance package in production and marketing, and the installation of model GAP farms (called “window display” farms in Nicaragua).

As a result of implementing the AMP model program:

- Thirty-six producer groups in Guatemala, seven in El Salvador, and seven in Nicaragua have participated in this program.
- Program implementation has been carried out with 36 groups in Guatemala, seven in El Salvador, and seven in Nicaragua.
- Since January 2005, over 11 million pounds of vegetables (peas, beans, mini squash) produced by farmers who are implementing the Good Agricultural practices program, have been sold in European, US and regional markets with a combined value of over \$4.3 million.
- During this time over 320,000 daily jobs and over 100 permanent positions have been generated.
- A website with information on Sanitary and Phytosanitary concerns (SPS) in the region (www.msfinfo.com) was developed to help producers with Food Safety and export issues. Since September 2005, the site has received over 19,000 hits from 28 countries and an average of 120 hits per day – the site is now also in English.
- In a marketing visit to Europe, the buyers expressed surprise that the Guatemalan producers were implementing Good Agricultural Practices and promptly placed

orders for product. Since late March, sales for two months to Europe have been over \$55,000, with an increase of over 30% returned back to growers.

- During a recent trip to mainland China, it was quite apparent that Central America growers participating in the Quality Assurance program are “light years” ahead of their Chinese counterparts regarding Food Safety – a huge marketing advantage in Europe and the United States.

3. AMP MODEL PROGRAM, PART 1: TECHNICAL COMPONENTS

The AMP approach to the technical challenges experienced by small farmers in accessing emerging markets involves a tightly structured yet flexible set of technical components. By following through with the systematic implementation of the programmatic steps to each component, producers and technicians work together to identify and address key constraints and opportunities throughout the value chain.

The specific technical components involved in the AMP approach include:

- Support for development of CAPGAP standards;
- Ongoing technical assistance for marketing and production;
- Good business practices (GBP);
- Good agricultural practices (GAP);
- Good post harvest practices; and
- Potentially a revolving fund for provision of essential small infrastructure or equipment needs.

A description of each of these components follows below.

3.1. SUPPORT FOR DEVELOPMENT, ADOPTION & IMPLEMENTATION OF REGIONAL/INTERNATIONAL STANDARDS

The PFID-F&V partnerships seek involvement in the development, application and evaluation of GAP standards in a variety of settings. If the partnership can play a role in the establishment of those standards, it is in all the more strategic a position to prepare producer associations to adopt the best mix of practices for the market in question. In India and Central America, in Europe and in Southern Africa, PFID-F&V has provided technical assistance toward the definition of regional and global GAP standards.

In the case of Central America, PFID-F&V supported the development of the CAPGAP standards, thereby bringing together PIPAA & CARHCO standards with those of other key stakeholders in the region and a clear road for CAFTA implementation. In handing out the credit for the development of these standards, however, it should be noted that PIPAA has been implementing GAPs in Guatemala since the mid 1990’s. In the beginning, they focused on snow peas, then raspberries, mangos and papayas. In the early days, they focused entirely on the FDA standards to assure that producers exporting to the States were complying with FDA. However, it was very difficult for auditors and technicians to closely follow applicable Codes of the Federal Register (CFR), so about 80% of the FDA’s standards were developed into a checklist that made it easier for

inspectors to do the initial diagnosis and to make recommendations. Those FDA standards that were not relevant to the Guatemala situation were not included – about 20%. The checklists created remain basically the same, although certain items have become more defined or more specific.

It should also be noted that Hortifruti has been using a modified GAPs program for over 10 years with their exclusive producers. The program was originally based on FDA standards, but a EurepGAP style checklist was later instituted because a checklist is more manageable for their technicians. The majority of their guidelines come from EurepGAP and pay close attention to varieties, planning and planting cycles, fertilizer use – all from the perspective of a retail store.

Finally, Fintrac, a US consulting firm working in Honduras, was using strict EurepGAP standards to allow their farmers to export to Europe (sweet potatoes, peppers). Their growers are certified EurepGAP by a third party company, and thus a consideration of EurepGAP standards themselves was also underway in the region.

Based on the existing three GAP lists that were being implanted throughout the region, the conference was able to build on the similarities among stakeholders involved. A three day session was held with technicians from all organizations (plus academia), during which all three separate checklists were revised item by item (and in many cases each item was discussed in detail).

CAPGAP List:

- Traceability
- Record keeping and internal self-inspection
- Varieties and rootstocks
- Site history and site management
- Soil and substrate management
- Fertilizer use
- Water use
- Crop protection
- Harvest and transfer to packing facilities
- Produce handling in packing facilities
- Waste and pollution management, recycling and re-use
- Worker health, safety and welfare
- Transportation

(PFID-F&V/CAP Workplan: August 1, 2005 to July 31, 2006, p.6).

The food safety dimension of the PFID-F&V work in the Central America region is thus directly linked to the CAFTA process and is therefore highly applicable to ongoing and planned FDA and USDA initiatives in the region, especially those relating to occupational and environmental safety and health across borders.

3.2. TECHNICAL ASSISTANCE FOR MARKETING & PRODUCTION

Technical assistance throughout the value chain forms a transversal component, i.e., interlacing all other technical components in the AMP approach. As an initial step, AGIL marketing specialists identify specific constraints within the value chain that, if addressed, could result in real producer benefits in the short run. For example, in the case of Estancia, before working through the AMP process, producers were paying drastically higher transportation costs than necessary. The AMP process allowed the newly formed LeStansa, S.A. to save as much as 82 Quetzales per quintal, based on an average sales price of 250 Quetzales/quintal, in a very short time.

Once the scene is set with a possibility of immediate short term benefits (in addition to longer term, and sometimes more significant, benefits over time), then the overall program is set into gear, with capacity building provided in the areas of GBP and GAP, including good post-harvest practices as well.

At the same time, technical assistance continues to be important at various points along the way. Assistance to producer organization over time tends to become increasingly refined, focusing on cutting costs, improving quality, addressing niche markets, new seed, control of new plagues, value-added packaging, etc.

Illustrative Examples of T.A.:

- Crop-specific production programs
- Crop diversification
- Validation of new seed varieties
- Cold chain practices
- Post harvest technologies
- Market diversification
- Internet/web use for market information
- Contract negotiation

(PFID-F&V/CAP Workplan: August 1, 2005 to July 31, 2006, p.6).

Another form of technical assistance and, to a significant extent, capacity building takes place during producer visits to import countries. Of special value are those taking place during key trade shows, particularly if there is a concrete/pre-arranged opportunity for sales that could result from a given producer-buyer interaction.

3.3. GOOD BUSINESS PRACTICES

Capacity building in good business practices for small and medium scale producer organizations essentially results in “a democratization step whereby informal businesses are transformed into formal businesses that can compete on a global scale” (Fundación Agil 2006, p.8). Attention to the establishment and development of GBPs as an early step may begin with the legal definition of the producer group as an association,

cooperative, corporation or some other legal form. Organizations then move on to organize and maintain their own accounting database and procedures, and they develop a variety of other required and suggested practices throughout.

Good Business Practices:

- Formalize and legitimize the organizations (civil association, cooperative, corporations)
- Registration and compliance with tax obligations
- Basic bookkeeping
- Implementation and/or actualization of accounting records, systematize invoice records (accounting books, receipts, purchasing documents, export licenses, etc.)
- Compliance with tax reporting
- Implementation of cost accounting (production cost control, post harvest and marketing to calculate prices, cost/benefits, profits)
- System to monitor regional and international prices
- Training in formulation and evaluation of projects
- Social responsibility

(PFID-F&V/CAP Workplan: August 1, 2005 to July 31, 2006, p.6). See Annex D for a detailed checklist.

One essential aspect of Good Business Practices is that administrative and accounting controls must be properly installed to provide the necessary reports for decision-making. In the case of LeStansa, S.A., their system is based on easy to use, pull down menus, with data entry and reporting accomplished via readily available Access and Excel software.

The improved practices in business management focus increasingly on information, not only for more effective administration, but also for demonstrating cost saving opportunities to the growers. In comparing the traditional cost of transport of green beans from Estancia de la Virgen to Sumpango, as noted above, GBP analysis determined that the existing approach was much more costly than necessary. The following table represents the savings realized by adopting the AMP Good Business Practices (GBPs) and evolving into the corporation called LeStansa, S.A.

Table 1. LeStansa, S.A. : Pre-AMP Transport vs. Post-AMP Transport

ACTIVITY	PRE-AMP COST (Quetzales/quintal)	POST-AMP COST (Quetzales/quintal)
Transport costs	30.00	10.00
Labor costs related to sales	25.00	2.00
Losses due to bad purchasing practices	30.00	0

ACTIVITY	PRE-AMP COST (Quetzales/quintal)	POST-AMP COST (Quetzales/quintal)
Other expenses related to sales	10.00	1.00
TOTAL COSTS	95.00	13.00
AMOUNT SAVED VIA AMP	82.00	

(Fundación AGIL “Metodologia AGIL para la Gestion Empresarial” Powerpoint; Note: Savings of 82 Quetzales is based on an average sales price of 250 Quetzales/quintal.)

Another way that the AMP approach has benefited LeStansa, S.A. has been through the development of a sparse but effective staffing pattern, including:

- Business Manager/Accountant (1);
- Administrative Assistant (1);
- Plant Supervisors (2);
- Packers (paid per box; 25);
- Concierge (1);
- Truck Driver (1);
- Bakers (2); and
- Green House Worker (1).



Figure 1. Administrative Assistant at LeStansa, S.A.

AGIL provides the initial GBP assessment, while the producers pay for the capacity building. Initial tasks include drafting the organizational constitution and legal registry, saving and organization of regular and tax receipts (recibos and facturas), followed by capacity building for organization directors, and formation of working committees (sales/marketing, oversight, credit and production). Follow-up work includes updates on

changes in tax legislation, development of project proposals (to seek additional investments), and development and application of a business plan for the producer group as an enterprise.

The type of assistance given will vary depending on the specific producer group’s organizational history and the human resources available. So, while LeStansa is quite

advanced in the process of organizational and business practice according to the AMP model. APAC, on the other hand, has only been associated with the AMP approach over the last few years. And El Rincon Grande, as a last example, has only been in the program for a year. After making a number of costly investments in the infrastructure of Good Agricultural Practices, producer organizations can begin to see notable benefits. While the rewards involved are not necessarily a higher price in the marketplace, the outcomes do include reduced costs – and thus increased net incomes, a guaranteed market and price, and protection from food safety scares due to an ability to trace each producer's product from field to consumer and back again.

3.4. GOOD AGRICULTURAL PRACTICES

The example of the newly established CAPGAP standards, as discussed in section 3.2. above, provides a composite of existing GAP standards, including those from the FDA, EurepGAP and PIPAA, the latter based on FDA standards. (Annex E includes a more detailed CAPGAP checklist and a list of associated definitions.) Producers participating in the AMP approach learn to adopt these standards in their own fields, sometimes opting to adopt additional standards related to Fair Trade and Rainforest Alliance certifications if it allows them to enter new, more advantageous markets.

Once producer groups are selected, PIPAA carries out a diagnostic/evaluation based on CAPGAP. PIPAA inspectors then make recommendations as to the changes (in infrastructure, cultural practices, production practices, etc.) that must be accomplished in order for the producers to comply with the GAP standards. The implementing firm, organization, nonprofit, etc. then assists the farmers through a variety of training methods to help them implement the standards.

An essential component of AMP involves the installation of CAPGAP demonstration plots or farms, (the size will depend on the crop) in collaboration with one producer in each group. This plot has the necessary infrastructure as dictated by CAPGAP and serves as a training tool for the rest of the producer group members.

CAPGAP Demonstration Plots:

- Fenced in property
- Latrines
- Waste receptacles
- Fumigation equipment
- Cleaning equipment
- Personal hygiene
- Information posters and instructional pamphlets
- Used for education of primary/secondary school students (in addition to producers).

(PFID-F&V/CAP Workplan: August 1, 2005 to July 31, 2006, p.6).

In a very recent example of an investment made to improve the infrastructure for GAP standards, we can take a look at the results visible at El Rincon Grande, as noted in the following photos. Here, a previously contaminated water source has been eliminated through access to a new well and associated pump as well as a variety of other key changes.



Figure 2. Demonstration plot at El Rincon Grande



Figure 3. Demonstration plot includes barrier to animal traffic

Depending on the willingness of the producer organization and their immediate needs, the GAP implementation process can take up to eight months. At the end of this period, the organization requests that PIPAA do another evaluation to verify their compliance. If PIPAA recommends more changes, the process repeats itself until the group of producers complies with all required standards. PIPAA does not “certify” the growers; they only “verify compliance with market standards” as put forth by the intended market, most

often the local supermarkets. If a group wants to export to Europe, it is necessary that they seek certification from a EurepGAP authorized entity such as Latu Systems. However, given the fact that PIPAA has verified their compliance with CAPGAP, the EurepGAP certification is much easier and faster to obtain as a result (slight paraphrasing of PFID-F&V Leader Award Workplan 2005-2006 pp.12-13).

3.5. GOOD POST HARVEST PRACTICES

The emphasis in the AMP model has tended to focus on the end stages of GAP, including harvesting, sorting and grading, storage, cooling, minimal packing. Standards must be met in each of these areas, from the actual picking of the fruit or vegetable in the field, on through selection for size and quality, on through packing, cold chain storage and transport. The following photos illustrate just how far participating producers have come in implementing the AMP approach and associated GAP standards.



Figure 4. Old style storage structure



Figure 5. New GAP qualified storage facility at El Rincon Grande



Figure 6. Sorting and grading area at LeStansa, S.A.



Figure 7. Cold storage room at LeStansa, S.A.



Figure 8. Product moves from cold room to cold truck



Figure 9. APAC ships product under ALIAR label



Figure 10. APAC also ships product under Frutesa label

It is important to point out that, as of this writing, the program does not address actual product transformation, e.g. canning, fresh cuts, freezing, as these involve attention to additional, more challenging standards, which can best be addressed at a later stage in the process.

3.6. ADDITIONAL ACTIVITIES

It may also be useful to include an activity component to address pressing equipment and infrastructural constraints to improved production and marketing performance. In the case of the AMP activity in Central America, additional funding was made available to address basic equipment needs, e.g. water filters, etc. In addition, efforts were made to bring in outside funding (e.g. FIS) to address important infrastructural constraints, e.g. irrigation systems, etc.



Figure 11. LeStansa, S.A. green house production of tomatoes demonstrates new approach to meeting market demands

4. AMP MODEL PROGRAM, PART 2: IMPLEMENTATION APPROACH

The other essential part of the AMP model needing to be addressed involves the programmatic approach to implementing the aforementioned technical components. Aspects to consider here include:

- Choice of partnerships;
- Staffing and related considerations;
- Work planning and timelines;
- Cultural appropriateness;
- Sustainability – both financial and environmental; and
- Performance measurement.

The following sections outline these elements in greater detail.

4.1. CHOICE OF PARTNERSHIPS

The USAID Partnerships for Food Industry Development – Fruits and Vegetables activity seeks to develop a productive mix of partners in any given country or regional initiative, including partnerships with producer organizations, operational alliances, and funding

partners. In the case of the AMP program in Central America, representatives of each of these stakeholder groups were involved.

Producer Organizations -- The first step in the AMP model was the selection of the producer groups or businesses. Such groups could already be exporting to US markets and their marketing agents or buyers have requested that they begin the process of implementing GAPs. More likely, however, these producers will be selling their produce to national or regional markets, and those markets will be requiring stricter standards. The best case scenario is that brokers and retailers (for Central America, these were La Fragua, Super Selectos, Hortifruti, Southern Specialties, Melissa's, etc.) request that the farmers implement GAPs as a prerequisite to forming a contract with the buyer. The initial selection (a somewhat passive approach for AMP, as there is a pent-up demand for program implementation) would only include farmers who are producing for a market that is demanding changes in order to assist those farmers to maintain their market share. The second, more proactive stage would be to "spread the word" through a series of introductory sessions on GAPs to those farmers who are producing for small central markets, plazas, and fair days but who want to move into higher value markets.

Operational Alliances – Alliances were formed with a variety of stakeholders throughout the supply chain. A *secondary organization* of producer groups (a federation named ALIAR) was identified for collection and shipment of product in larger quantities, sometimes including the addition of services. In addition, *buyers* of product were identified early on, be they a retailer, like La Fragua of CARHCO or *exporting or importing companies*. *Private sector agricultural export chambers/commissions*, e.g. AGEXPRONT, can also be good alliance partners, depending on the product and country involved. Finally, it is also important to include representatives of relevant *government agencies* that verify compliance and/or provide training support, T.A. in targeted areas or other resources in targeted/complementary areas, e.g. PIPAA and MAGA.

Donor/Funding Partners – USAID/Guatemala, CAP and EGAT have all been highly supportive of the development of the AMP model. While USAID support can thus play a crucial role in getting such a program off the ground, it is nevertheless important to work toward a mix of funding partners with the potential to provide complementary resources. In the case of the Fundación AGIL, they have been able to secure funding from Helvetas, BID-FOMIN, and FIS.

4.2. STAFFING PATTERN & RELATED CONSIDERATIONS

The following positions are considered those most essential for smooth operation of the AMP model:

- **Project Director (and possibly a Deputy Director, depending on program size)** -- Responsible for project supervision and implementation within one technical area. Serves as USAID liaison for monitoring, evaluation and reporting.
- **Project Administrator** – Oversees project administration.
- **Agricultural Technicians & GAP Extension Agents** – EurepGAP certified leaders/auditors – Implement GAP component. The number needed depends on

extent of program operations/target population. Additional agricultural extension agents needed from local areas will also depend on specific extent of program operations.

- **Enterprise/Organizational Development Specialist & GBP Extension Agents** – Provide leadership for implementation of GBP component. Additional GBP extension agents are required and are especially necessary if the producer organizations have little organizational history/experience.
- **Office Support Staff** – Hire minimum number necessary. Includes **Computer Specialist** to address computer considerations (equipment and ICT training needs) in the field as well as in the main project office.
- **Local Consultants** – Support specialized technical areas such as agricultural production, processing, cold chain management, basic construction, accounting and information management, and non-GAP environmental considerations that may arise.
- **International Consultants** – Support highly specialized areas where there are no available local consultants, e.g. cold chain management, advanced marketing tools, new production and packaging technologies, disaster assistance, etc.

Fundación AGIL has developed and refined this staffing pattern over the years, so that the aforementioned positions will now be applied to their newly awarded Cooperative Agreement for USAID/Guatemala. It is important to note that there is some degree of flexibility built into this staffing pattern, however it is recommended that the senior staff include a mix of agronomic and social science backgrounds. In addition, it is advisable for key staff to have fluency in one or more indigenous/field languages, in order to review/test qualifications of the program field staff in this respect.

Another important consideration in hiring the technical and professional staff that will be working on such an initiative is that individuals have an appropriate field-orientation, i.e. a comfort and respect for rural lifestyle/customs and ethnic diversity. Seeking out staff who demonstrate such qualities can significantly improve the rate of program success. Hiring staff who lack such qualities can detract from positive outcomes.

A substantial degree of success achieved under the AGIL model can be attributed to the manner in which AGIL technicians dealt with the producers. The technicians were culturally sensitive from the onset, and the positive response from the LeStansa group, which included hosting repeated congenial social events, thereby providing a lot of motivation to the technicians to take the extra time to explain complex processes and procedures the producers must follow. Most importantly, the technicians were capable and willing to rephrase many of the complex details and sequencing specifications required for a successful market entry and the sustained provision of quality products. The technicians who continue with Fundación AGIL are well geared to the idea that flexible implementation is exceedingly important, but the exigencies of the market system are such that all—technicians and producers—know that a high level of discipline and responsibility must be maintained.

4.3. WORK PLANNING & TIMELINES

The AMP model used a definite phasing approach to bringing in the technical components, roughly in the order they were discussed above but with a few additional considerations:

1. **Start-up** – Office set-up, diagnostic studies, development of checklists and manuals, etc.;
2. **Support for development, adoption and implementation of regional/international standards** -- Depending on the country situation in which the project is to take place, it may be possible to facilitate the shaping of GAP and other standards in the early phase of the program;
3. **Technical assistance for marketing & production** – Identification of near term market opportunities must take place early in the first year of implementation. However increasingly refined technical assistance in marketing and production should be provided as a transversal process in all components and throughout the project cycle;
4. **Good entrepreneurial practices** – Needs to be provided early on as a foundation for all future activities;
5. **Good agricultural practices and good post harvest practices** – These two components should be implemented simultaneously;
6. **Ongoing technical assistance for marketing & production** – An increasingly refined approach to cost saving, value added and new product development;
7. **Close-out and/or transition to new funding** – See section on Sustainability below. In the case of MSU, this transition involved a search for new Mission buy-ins and non-USAID sources of funding. In the case of Fundación AGIL, they were recently awarded their own, independent Cooperative Agreement by USAID/Guatemala for continuation and expansion of their activities in that country.

As a cross-cutting element to the above program phases, PFID-F&V Central America has included the formation of local capacity to implement the AMP model. For example, this year's workplan notes that:

Because few organizations exist at the present time with the capability to implement PAMs, the Fundación Agil, in alliance with PIPAA, will conduct train-the-trainers courses for technicians affiliated with technical assistance programs or organizations (Technoserve, CRS, local consulting firms, etc.). The initial introductory course consists of a brief 2 day overview of GAPs and one field visit to carry out an actual diagnostic baseline. If the organizations are interested in implementing this type of program, an additional course will be offered that focuses GAP implementation in the field and includes a more in-depth view of the CAPGAP. A final exam would be given to assure only knowledgeable technicians are selected. In the beginning, Fundación Agil and PIPAA would follow up with the technicians once they begin program

implementation with their producer groups until both parties are satisfied with progress.

Additional training may be provided by Latu Systems, a Costa Rican-Uruguayan organization that specializes in EurepGAP certification. This organization may be contracted by Fundación Agil to carry out a one-week, academic style course on EurepGAP auditor certification, again to provide local technicians with the skills to become trainers, auditors and inspectors” (PFID-F&V Leader Award Workplan 2005-2006 pp.12-13).

4.4. CULTURAL APPROPRIATENESS/EFFECTIVENESS

Many small and medium scale producers around the world come from cultures other than the dominant national culture. For example, in the case of Guatemala, almost 90% of AMP participating producers speak one of five Mayan languages. As such, it is essential that instructional materials be presented:

- In the local language(s);
- According to local logic;
- With images of local/rural/indigenous actors used throughout.

Thus, for capacity building efforts on Good Agricultural Practices, materials and presentations should take place in the most local language possible, e.g. Mam, Kekchi, Kwachiquel, etc., not Spanish, so that the largest number of people possible will be able to understand the information therein. This point is especially salient for reaching women members of producer households, as they often bear significant responsibility for a variety of cultivation and post-harvest tasks, yet they are more often monolingual in a local language.

It is also important to use images and stories that demonstrate the local reality. For example, in considering why it is important to protect cultivated plots of fruits or vegetables by some kind of fence or wall, it could be useful to show how animal waste can enter the field – via a pet dog or a wandering farm animal -- and the resulting bacteria can, in turn, enter the produce on the vine. This type of imagery, using socially familiar figures and terms, can help reinforce the need for construction of both fencing and latrines, that latter which must be located a set distance from the plots in question.

Another potential challenge related to language involves situations where the local language is spoken but rarely written. In such cases, materials must be developed for use with non-literate populations. In the case of the AMP in Guatemala, the Fundación AGIL sought out collaboration with the Guatemalan NGO Aj B’atz Enlace Quiche, an indigenous run organization with experience in developing educational materials in a variety of languages and cultural formats.

New information and communication technologies (ICT) can provide appropriate tools for reaching not only non-literate group – i.e., through highly interactive imagery and use of spoken instructions – but also for reaching the most remote groups and for achieving

sustainable/ongoing learning programs. Fundación AGIL plans to develop a series of such ICT programs to be accompanied by field visits for workshops and technical assistance as well. The initial CD will have been completed at the close of the PFID-F&V project. Future work by Fundación AGIL will incorporate expert anthropological, linguistic, and ICT expertise in its training and communications efforts, thereby making the acquisition of new concepts more efficient and cost effective. It should be stressed that the use of ICT in the required organizational and training work is not a substitute for traditional training methods involving the physical presence of technicians, ICT must be viewed as a complementary mechanism that allows for a continual consultation of content material by farmers in the temporary absence of the trainers between training sessions. For example, by leaving behind CD-ROMs with bilingual content material (in Spanish and a Mayan language—Kaqchikel, K'iche', Tz'utujil, or Mam), the farmers organized into a group can continuously consult and discuss among themselves the details and parameters required in the various thematic areas mentioned above.

Concerning gender and cultural issues, during the functioning of the earlier USAID AGIL project implemented by Abt Associates, Inc., women from Estancia La Virgen requested assistance and limited financing to develop an egg production center. Technical assistance was contracted out to a local Mayan organization, some limited grant funds were used to purchase materials, and labor was donated by the community. Today, the hens produce sufficient eggs to satisfy local demand, and the marginal gained income maintains a healthy operation. Furthermore, the AMP approach as implemented by PFID-F&V and Fundación AGIL made sure to disaggregate data on project beneficiaries by gender and ethnic affiliation in order to assure that the project benefits were indeed arriving in an equitable manner.

4.5. SUSTAINABILITY -- FINANCIAL & ENVIRONMENTAL CONSIDERATIONS

Financial Sustainability

We have already mentioned the importance of having a number of funding partners who will support the program, both from the international donor community -- e.g. multilateral donors such as the European Union, the World Bank, the Inter-American Development Bank, and bilateral members such as Japan, Taiwan, USDA, FDA – and from national government agencies and funds -- e.g. Ministries of Agricultural or Rural Development, Social Investment Funds, etc. It is also important to cost-share with producers, i.e., implementing a fee for service/cost sharing formula, which may be phased in over time. As noted by Fundación AGIL, this dimension has been one of the great strengths of the AMP approach:

...In the case of quality assurance mechanisms, groups contribute 25% of costs through labor contributions, payment for technical assistance, and associated costs for on-going training activities, and in many cases pay up to \$800 per quarter acre plot in materials for infrastructure that includes mesh or barbed wire fencing, latrines, recycling systems for pesticide containers, water filters, and other construction items...This cost-sharing

formula combined with the cash investments [for model plots] attains the 1:1 ratio that portends successful and sustainable project execution. (2006:9-10).

Funds contributed by the producer groups are monitored through local accounting systems and are auditable. Another kind of sustainability, i.e., guarantee of lasting and hopefully ongoing results, can be achieved through partnerships with local universities. In the case of AMP, the Agricultural College of the Universidad de Rafael Landívar has an informal alliance with PIPAA. The original plan was to have PIPAA or Fundación Agil provide university students with training courses in CAPGAP during the school year. Graduate or graduating students would then provide support to the AMP. The students would live in the field with selected producer groups to give them hands-on training and follow up on the CAPGAP and business courses depending on their experience and skills.

Environmental Sustainability

The nature of the AMP project design precludes the need for any additional kind of environmental impact assessment or ongoing monitoring in addition to that described above. The very nature of the GAP standards presented here is "...to assure that growers are in compliance with FDA/EPA and USAID environment concerns" (Fundación AGIL 2006, p.20). Of particular importance is the role of an appropriate government/parastatal organization that monitors compliance of the associated environmental standards, as in the case of the Ministry of Agriculture-private sector organization PIPAA for the AMP project implemented in Guatemala. Subsequent adaptations of the AMP model to new contexts are advised to involve a similar host government counterpart in their activities as well.

4.6. PERFORMANCE MONITORING PLAN

The primary objective of the AMP program as implemented in the Central America Region was: **Increased Household Incomes and Food Security**. As such, project activities contributed to a number of specific outcomes/results supporting this end, including:

Results 1: Rural organizations have strengthened business operations.

Indicator 1: Number of rural organizations with strengthened business operations.

Definition:

- Implementing GBPs, GAPs, GPHPs;
- Distinguishing high quality, safe products; and
- Able to access new markets and increase sustainability.

Result 2: Small and medium producers achieve increased sales.

Indicator 2: Amount of overall sales achieved by participating producers.

Definition:

- Sum of the sales counted through contracts and agreements with national exporters, supermarket chains, and dealers as well as sales to international markets.

Result 3: Small and medium producers achieve increased sales of certified products and those grown under GAP process.

Indicator 3: Amount of sales of certified or GAP verified products achieved by participating producers.

Definition:

- Sum of sales of GAP verified products (verified by PIPAA) and certified products (EuropGAP, Rainforest Alliance or others) counted through contracts and agreements with national exporters, supermarket chains, and dealers as well as sales to international markets.

Result 4: Increased rural employment generated.

Indicator 4.1: Total sum of day wages per year.

Definition:

- Number of work days paid. Includes disaggregated targets for production vs. post harvest, transportation and merchandising activities.

Indicator 4.2: Number of full time jobs generated per year.

Definition:

- Sum of day wages per year divided by 250 work days per year. Includes disaggregated targets for production vs. post harvest, transportation and merchandising activities.

Result 5: Increase hectareage cultivated using GAP verified methods.

Indicator 5: Number of hectares under verified GAP cultivation.

Definition:

- Number of hectares under cultivation that meet PIPAA requirements.

According to the AMP model, the M&E system design and operational function should track, at a minimum, associated data related to:

- Employment generation;
- Volume and monetary value of sales;

- Leveraged counterpart contributions (monetary and in-kind);
- Acceptance/rejection ratios by production lots (as a means to measure GAPs);
- Capacity building through training (including measurement of acquisition/comprehension of content); and
- Various indices that detect institutional strengthening—at the individual producer group level, at the federation level, at the Foundation/NGO level, and at the level of articulation with its partners (with real or in-kind counterpart contributions).

Disaggregation of data by gender, ethnicity, adult vs. youth should be carried out in the impact analyses (Fundación AGIL 2006, p.19).

Most of this information should be monitored on a continual basis in order to correct problems that may arise during the course of project implementation. In addition, the information obtained, if presented in an understandable manner, can be used to demonstrate potential opportunities or lost opportunities relating to increased income, the latter which may be corrected with timely adjustment or investments by the producers involved.

5. NEXT STEPS IN PROGRAM DEVELOPMENT

Both Fundación AGIL and MSU have plans for developing the AMP model further, as noted in the following section. A subsequent section discusses both EGAT and Mission suggestions on application of this model to new USAID contexts as well.

5.1. PLANNED EXPANSION AND REFINEMENT OF THE MODEL

Fundación AGIL will work toward a number of elaborations on the AMP model program via its newly awarded Cooperative Agreement from USAID Guatemala. As such, Fundación AGIL will continue to support the creation and strengthening of farmer producer organizations, producers' ability to meet national and international market standards for quality and food safety, and link to large international buyers of fruits and vegetable. Additions and refinements to the aforementioned AMP model include:

- An increased number of producer organizations that shorten their value chains by delivering product to Alianza para el Desarrollo Agroindustrial y Artesanal Rural (ALIAR), WalMart Central America, etc.;
- An increased emphasis on certifications other than CAPGAP, including EurepGAP, Fair Trade, Rainforest Alliance;
- Addition of fresh cut and other processing steps to increase value added to the farm gate price;
- The potential addition of a credit component to the program as a tool to manage initial infrastructural investments;
- Amplification of organizational development/strengthening for decision making, leadership, commitment/solidarity;
- Increased capacity in understanding of buyer considerations such as price determination, timing of payments, etc.;

- Improved supply/value chain logistics;
- Increased program emphasis on education/training of young producers and/or children of producers.

Michigan State University will also work toward refinement of the AMP model in the following aspects:

- Amplified support to developing value added processes through increased involvement of university faculty in research and development or technical assistance related to market intelligence, packaging, marketing, food safety, etc.
- A gender inclusive approach that includes:
 - Gender analysis of the produce value chains involved;
 - Collaborative elaboration of a gender action plan to assure equitable program benefits for women and men (including employment levels, wages, access to training and T.A., etc.);
 - Use of positive imagery concerning both women and men implementing GAPs, GPHPs or GEPs;
 - Use of women and men technicians or trainers;
 - Consideration of both women's and men's daily and seasonal work scheduling in determining meeting or training dates and times.
- Strengthened outreach to educational institutions to build their program curricula and teaching capacity in areas related to the F&V supply chain.

5.2. APPLICATION OF THIS MODEL TO NEW USAID CONTEXTS

USAID EGAT and Guatemala-Central America Program staff had the following observations and suggestions regarding future applications of the AMP model:

- Guatemalan producers are the trend-setters for produce production and sales in the Central America Region, providing some 90% of the vegetables entering intra-regional trade. Likewise, the AMP model's emphasis on food safety and PIPAA verification of CAPGAP compliance was the first of its kind in the region and has been adopted by La Fragua and WalMart. The next logical step would thus be application of the AMP model to other countries in the region via collaboration with the new USAID regional program for Central America and Mexico (CAM), now located in El Salvador.
- Consider development of a training module for USAID EG Officers, using the AMP model as a tool for developing program designs in a variety of contexts.
- Apply the AMP model to new program designs and improvement of existing programs, not only for fruit and vegetable marketing, but also for products such as coffee.

ANNEXES

- Annex A. Scope of Work
- Annex B. Documents Reviewed
- Annex C. Persons Interviewed
- Annex D. Good Business Practices (GBP)
- Annex E. Good Agricultural Practices (GAP)

ANNEX A. SCOPE OF WORK FOR PFID-F&V CENTRAL AMERICA PROGRAM MODEL CASE STUDY

7 April, 2006

BACKGROUND

One of the major hindrances to increased income generation among Guatemalan agricultural producers is limited access to reliable, higher value markets. Aside from traditional problems of inefficient production practices and lack of knowledge of diversified products, there is often a communication or information gap between what a farmer produces and what the market demands. Given the new and increasing emphasis on food safety and quality, this gap is widening. If the small and medium sized farmer is not able to implement Good Agricultural Practices (GAPs) in the short run they will be forced sell their produce directly to traditional markets, i.e. through intermediaries, or simply drop out. Farmers must be exposed to the changing “rules” – the new food safety standards – and then decide for themselves if they are willing to make the investment to have access to the new, more demanding more profitable markets.

In response to this situation, the USAID supported PFID-F&V/Central America “Access to Market Program” (*Programa de Acceso a Mercados - PAM*) works with producer groups in Guatemala to promote: 1) a stronger Guatemala certification system through PIPAA (the official certification agency); and 2) better access and increased income earning opportunities for small and medium size farmers.

This program has now been under implementation for just over two years. During the last year of program implementation, the PFID-F&V/CAP approach has evolved to the next level by:

- Refining the ongoing program approach based on lessons learned in Phase 1;
- Locking in sustainability of results through an intensive capacity-building component; and
- Pilot testing the revised approach in Guatemala and its potential for application in additional Central America contexts as well as other regions.

Before the end of this highly innovative program in July, 2006, it will be important to completely document the approach in a format that can be used as a resource for subsequent activities.

PURPOSE

To document the PFID-F&V AMP approach, the Central America office will contract the services of two consultants to:

- Identify the core elements of the AMP approach;
- Describe the dynamic model used in implementing this approach; and

- Organize this information into a format that will allow the approach to be replicated/adapted elsewhere.

APPROACH

1. Review relevant project documents;
2. Meet with PFID-F&V Central America COP to determine the list of individuals to interview and finalize interview topics;
3. Conduct interviews with key individuals in each AMP partner organization, including:
 - Fundación Agil
 - GOG Agricultural and Environmental Integral Protection Program (PIPAA)
 - GOG Ministry of Agriculture (MAGA)
 - La Fragua (CARHCO)
 - The Agricultural College of the Universidad de Rafael Landívar
 - Producer organization officials
 - USAID/Central America & Mexico Regional Program (E-CAM)
4. Visit field sites to view model program;
5. Work with the COP to fill existing information gaps and secure additional documentation and/or interviews, as needed;
6. Synthesize data from multiple sources to describe comprehensive AMP model and associated processes of implementation;
7. Organize supporting and reference materials into appendices;
8. Submit draft report for review by PFID-F&V Central America COP and Leader Award CTO; and
9. Finalize case study based on comments of COP and CTO.

DELIVERABLES

- A detailed description of the AMP program model components and associated implementation dynamics and considerations;
- A discussion of best practices and lessons learned;
- A catalogue of supporting and reference materials that would be of use to application of the model in other settings.

LEVEL OF EFFORT

PFID-F&V East Lansing Backstop – Team Leader

2 days U.S. based – preliminary document review

1 day travel -- round-trip

5 days in-country – additional document review, interviews, field visits

7 days U.S. based – drafting of deliverables (5 days) and finalizing draft based on comments (2 days)

TOTAL: 15 days LOE

Local Consultant – (from Fundación Agil) Technical Expert in GAP, GMP or related area

2 days – preliminary document review

5 days – interviews and field visits

3 days – drafting of deliverables

TOTAL: 10 days LOE

INSTITUTIONAL SUPPORT

Both consultants will report directly to the PFID-F&V Central America COP on this task.

The PFID-F&V Central America Office will:

- Identify and hire the local consultant;
- Provide documents for review;
- Recommend list of key informants to interview;
- Schedule interviews and field visits;
- Arrange logistics for in-country travel and hotel accommodations;
- Provide office space to model case study team; and
- Review draft version of deliverable and provide comments.

ANNEX B. DOCUMENTS REVIEWED

Abt Associates (n.d.) La gestion empresarial del directive actual. Powerpoint presentation. USAID/Guatemala AGIL Project.

Abt Associates (n.d.) La Estancia Agroindustrial Sociedad Anonima – Le Stansa. Documentary DVD. USAID/Guatemala AGIL Project.

Abt Associates (2003) Estudio de factibilidad para el desarrollo del proyecto agroindustrial y artesanal de Alianza para el Desarrollo Agroindustrial y Artesanal Rural (ALIAR). Guatemala-CAP Income Generation Activities Project (AGIL). November 2003).

Abt Associates (2003) Impact of the USAID/Guatemala AGIL Project: Team Reflections on the AGIL Experience. Guatemala City: Apoyo a la Generacion de Ingresos Locales (AGIL). December 2003.

Fundación Agil (2006) Program for Aseguramiento de la Calidad y Desarrollo de Pequenas Empresas – AC/DPE. Revised technical proposal for “Quality Assurance and Small Business Development. Guatemala: Fundación AGIL, March 24, 2006.

MAGA/AGIL (n.d.) Desarrollo empresarial rural: studio de caso LeStansa. Ministerio de Agricultura, Ganaderia y Alimentacion/Proyecto AGIL: Apoyo a la Generacion de Ingresos Locales.

PFID-F&V/Central America Program (2005) Central America Regional Workplan (including G-CAP and EGAT buy-ins). East Lansing: PFID-F&V, Institute for International Agriculture, Michigan State University, August, 2005

PFID-F&V/Central America Program (2005) Quarterly Progress Report (April 1-June 30, 2005). East Lansing: PFID-F&V, Institute for International Agriculture, Michigan State University, April, 2006.

PFID-F&V/Central America Program (2005) Quarterly Progress Report (July 1 – September 30, 2005). East Lansing: PFID-F&V, Institute for International Agriculture, Michigan State University, October, 2006.

PFID-F&V/Central America Program (2006) Quarterly Progress Report (October-December 31, 2005). East Lansing: PFID-F&V, Institute for International Agriculture, Michigan State University, January 2006.

PFID-F&V/Central America Program (2006) Quarterly Progress Report (January 1-March 31, 2006). East Lansing: PFID-F&V, Institute for International Agriculture, Michigan State University, April, 2006.

Richards, Mike (2001) Small farmer organization, technical training, and bypassing the middlemen: the AGIL strategy and Estancia model. Bethesda, MD: Guatemala-CAP Income Generation Project (AGIL), Abt Associates, Inc., January, 2001.

Richards, Mike and Wendy Rodriguez Barcos (2001) La Estancia Agroindustrial Sociedad Anonima – Le Stansa. Apoyo a la generacion de ingresos locales (AGIL) Guatemala-CAP. Mayo 2001.

ANNEX C. PERSONS INTERVIEWED

Farmers' Organizations

Pedro Alvarado, LeStansa, S.A.
Julio Icu, Presidente, APAC
Marvin Icu, Gerente, APAC
Valentin Mejia, Presidente, LeStansa, S.A.
Emilio Mulul Sal, Gerente Administrativo, Rincon Grande, R.L.

Fundación AGIL

Cesar Gomes, Marketing Specialist
Fernando Maroquin, Accountant & Board of Directors
Jorge Mendes, President
Mike Richards, Board of Directors

La Fragua

Julio Cesar Hernandez, Agricultural Manager

PFID-F&V/Central America Program

Richard Clark, Chief of Party, Michigan State University

PIPAA

Jaime Sosa, Executive Director of Integrated Agricultural and Environmental Protection

USAID/G-CAP

Glenda Paiz, Cognizant Technical Officer, PFID-F&V/Central America
James Stein, Team Leader, ETE
Loren Stoddard, ETE

ANNEX D. GOOD BUSINESS PRACTICES (GBP) -- CHECKLIST

Process of constitution, legalization and registration of the institution.

- Legal registration
- Notarized Deed of legal representation,
- Documents of legal registration and legal representation properly inscribed in the Civil Registry.
- Minutes
- Registry of tax obligations.
- Tax Identification Number
- Invoices.
- Authorized accounting records.
- Registration in Social Security

Development and implementation of management, accounting and information systems.

- Written and implemented policies and regulations. (Board of Directors, by laws, commissions, purchasing and hiring, credit, production, marketing and training)
- Written and implemented Administration Manuals. (Job descriptions, scopes of work, organizational chart, hiring process, etc.)
- Written and implemented Accounting Manuals. (Accounting Nomenclature, accounting registration process, accounting records, structure of financial statements, principles of internal controls).

Information system. Implementing and presenting reliable and appropriate information for decision making.

- Administrative and Accounting Controls properly installed to provide the necessary reports for decision-making. (Budgets, monthly financial statements, bank accounts, customer reports, delinquency, inventory, packing costs and indicators that guide the decision taking. (Break Even Point, projected flows, profitability, financial plans.)

Management tools for records and control of operations

- Invoices, receipts, production/packing forms, reception and payment of product forms, shipment forms, export license, third party packing controls, etc.

ANNEX E. GOOD AGRICULTURAL PRACTICES (GAP) – CHECKLIST

The main modules under the CAPGAP are:

1. TRACEABILITY

A requisite at all levels. For food safety concerns producers have to be able to track product back to the farm plot and mark their produce in such a manner that the end user is able to determine where the product originated. There are both simple, inexpensive ways of doing this as well as more complicated, expensive systems. A disciplined, well organized, paper-and-pencil system is very effective.

2. RECORD KEEPING AND INTERNAL SELF-INSPECTION

The registry system for keeping track of compliance with the GAPs (and trace ability). The number of records has been reduced from over 60 to a more manageable 15 – 20 depending on the operation. Records include pesticide use, inspections, employee work record, safety inspections, cleaning records, rodents captured, etc.

3. VARIETIES AND ROOTSTOCKS

More of a quality control measure to assure the producer is planting correct, disease free, plant material.

4. SITE HISTORY AND SITE MANAGEMENT

An important, oft-overlooked aspect, and with small farmers at times hard to substantiate or mitigate. If a certain piece of land has a history of contamination or a site is subject to erosion, run off from contaminated areas (livestock) these factors have to be improved or another parcel of land selected. (It is important to remember that GAPs are land-area and product-specific).

5. SOIL AND SUBSTRATE MANAGEMENT

This is most important to those growers using growing materials other than common soil – for greenhouse, seedling production etc.

6. FERTILIZER USE

One of the more important sections including fertilizer use, application equipment and controls. The CAPGAP standards put a very high importance on the use or misuse of organic materials.

7. WATER USE

Probably the most important section in CAPGAP (in EurepGAP they are more concerned with irrigation techniques). This section deals with water used for irrigation, fumigation and packing; irrigations systems; water quality and water sources.

8. CROP PROTECTION

One of the longer, more complex sections that deals with all aspects of pesticide use. Fortunately, in many areas of Central America, major inroads have been taken in this area so while extremely important, every farmer is aware of misuse of pesticides.

9. RECOLLECTION

This section goes hand in hand with pesticide use and refers to proper collection and disposal of used containers.

10. PRODUCE HANDLING IN PACKING FACILITIES

This section involves post harvest and packing shed procedures. Although there is a separate set of guidelines for Good Manufacturing Practices, they are more sophisticated, complex and deal with major packing companies. This section refers to basic practices for simpler sheds. Once packing operations reach a certain level then GMPs must be implemented.

11. WASTE AND POLLUTION MANAGEMENT, RECYCLING AND RE-USE

This section is tied into the pesticide section as well as the disposal of other inorganic materials – plastic, boxes, plant residues, etc.

12. WORKER HEALTH, SAFETY AND WELFARE

A very important section and although a difficult task, given cultures and traditions, one that has to be implemented at an individual as well as plant operation level.

13. TRANSPORTATION

Lightly covered under EurepGAP or covered under GMPs this is included in CAPGAP given the circumstances involving transportation within Central America and the use of beasts of burden, small pick up trucks, family use vehicles and third party transport. A very necessary section to assure food safety once the produce has left the farmers hands.