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MARKET ACCESS AND
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MARKET ACCESS AND POVERTY ALLEVIATION 2

ANNUAL WORK PLAN 2008

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MAPA TEAM

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CONTENTS

EXECUTIVE SUMMARY	7
INTRODUCTION	7
GENERAL ASPECTS	7
PRIMARY MAPA2 INDICATORS	8
OUTSTANDING ASPECTS OF THE SECOND YEAR.....	9
VALLEYS COMPONENT	11
DESCRIPTION AND MAPA OBJECTIVES	11
PROGRAMS.....	11
Onion	12
Spices	13
Chili Peppers	14
Tomato	14
Table Grape	15
Peanut.....	15
Stone Fruit	16
Berries.....	16
New Opportunities	17
Cut Flowers	17
Vegetables.....	17
Cross-Cutting Activities.....	18
The Environment.....	18
SIMA	18
DER.....	18
Monitoring and Evaluation.....	19
Training and Communication	19
DEVELOPMENT OF AGRO-PRODUCTIVE CHAINS IN THE	
ALTIPLANO.....	21
DESCRIPTION AND MAPA OBJECTIVES	21
PROGRAMS.....	22
Organic Sweet Onion	22
Quinoa Flower	23

Fava Bean.....	23
Bio-Inputs	24
Carrot.....	25
OUTPUT INDICATORS FOR MAPA2: 2007 FISCAL YEAR.....	26

EXECUTIVE SUMMARY

INTRODUCTION

This plan is the third in the life of the “Market Access and Poverty Alleviation 2” (MAPA2) Project and covers a twelve-month period beginning October 1, 2007. The Project is financed by USAID/Bolivia and implemented by a consortium lead by Chemonics International that includes Prime International Inc. and the PROINPA Foundation (Foundation for the Promotion and Research of Andean Products). The total value of the contract is US\$ 9,429,446. The Project has been in operation since September 2005, and its anticipated closing date is September 29, 2010.

GENERAL ASPECTS

The MAPA2 Project is the continuation and extension of the MAPA1 Project that operated for five years. The MAPA1 Project was able to significantly reduce poverty in various farming families through agro-productive development. During its implementation MAPA1 benefited a total of 45,490 families in the valleys and Yungas of Bolivia, helped these families increase their income from supported crops by 103%, increased market competitiveness and the business value of 14 agro-productive chains, and improved access to market information for 640,000 farming families in Bolivia. The MAPA1 Project had a contract value of US\$ 21,600,373. It produced a household income increase of US\$24,852,734 for its beneficiaries and a US\$78,916,727 impact on the Bolivian economy.

The MAPA2 Project is one of the activities contributing to the achievement of Strategic Objective No. 2 (SE2) of the USAID Mission in Bolivia through its “Economic Opportunities” Office, which is to “increase the income of low-income Bolivians.” The MAPA2 Project, together with the other activities of USAID/Bolivia, contributes to Intermediate Result 2 (IR2) of SE2 “Access to improved technologies and markets.” In this context, the objective of the MAPA2 Project is to “Increase the income of a significant number of low-income families living in the Bolivian valleys and altiplano (high-plains) by facilitating access to technologies and markets.”

The MAPA2 Project initially had four general objectives:

- Linking together the public and private sectors in order to bring about greater profitability for stakeholders in agro-productive chains through access to agricultural technology and markets.
- Promoting and supporting FDTA-Valles (Foundation for the Development of Agricultural Technology of the Valleys) as a sustainable, effective and efficient organization for supporting and stimulating the development of agro-productive chains in the valleys region of Bolivia.
- Promoting and supporting stakeholders in the development of agro-productive chains in the altiplano region of Bolivia through funding, technical assistance, and training, in addition to providing technical and financial support to FDTA-Altiplano (Foundation for the Development of Agricultural Technology of the Altiplano).

- Stimulating and supporting improvements in the political and regulatory development of the sector through strengthening SIBTA (Bolivian System of Agricultural Technology), SENASAG (National Service of Agricultural Health and Food Safety), the RAU (Unified Agricultural Regime) and RITEX (Temporary Import Regime for Exports).

The course of MAPA2 Project activities during the 2007 Fiscal Year (FY2007) was characterized by the following aspects:

- The availability of financial resources as put forth in the “obligation” contracted with USAID limited direct interventions in the altiplano and reduced the intensity of technical assistance to joint interventions with FDTA-Valles, mostly in international consultancies and technology acquisition trips.
- The changes in the institutional and political scenario as President Evo Morales is elected to power changed the potential of the MAPA2 Project to achieve results in the public policy area. As a consequence of this, Objective 4 of the Project, as well as its indicators, was eliminated from the contract by an amendment.
- Despite having experienced a reduction in its ability to carry out interventions with its own resources, MAPA2’s administrative and technical responsibility is mainly in relation to the size of FDTA-Valles’ project portfolio, which continued to grow. This meant that both the activities level and results in the valleys region surpassed contract goals and previous planning.

The general objectives of the MAPA2 Project were curtailed to three following a contract amendment, with the consequential reduction of some indicators.

PRIMARY MAPA 2 INDICATORS

The indicators and final goals for MAPA2 are the following:

- Increase in family income for 20,000 households.
- Households with improved access to technology (production, processing, and marketing) and market services: 20,000 (16,000 in the valleys and 4,000 in the altiplano).
- Producers with improved access to markets: 20,000 (16,000 in the valleys and 4,000 in the altiplano).
- Strengthened agricultural organizations: 20 (16 in the valleys and 4 in the altiplano).

SECTION I

OUTSTANDING ASPECTS OF THE SECOND YEAR

During the prior term, the MAPA2 Project achieved the following intended benchmarks:

- Quarterly reports were sent to USAID, always within the time frame stipulated by the contract.
- Periodic coordination meetings were held with the executors of the Title II program, and joint actions were carried out in the onion chain with FHI and Save the Children.
- The PERSUAP (Pesticide Evaluation Report and Safer Use Action Plan) was updated and distributed among service providers and project beneficiaries as planned.
- The application of environmental monitoring and evaluation procedures continued in interventions, in accordance with that proposed and approved in the PEA (Programmatic Environmental Assessment).

The Project has made 40% progress in its timetable. Project performance indicators demonstrate the following degree of fulfillment:

- **Increase in family income for 20,000 households.**
The goal for the entire project is Bs. 33,270,775 for the valleys and Bs. 4,978,675 for the Altiplano. With regard to the valleys, the goal for the entire project already has been surpassed by 15%, with an increase in accumulated incomes to date of Bs.38,146,170. With regard to the Altiplano, 12% of the goal has been met with Bs. 606,123.
- **Households with improved access to technology (production and processing) and market services.**
The goal for the entire project is 20,000 households (16,000 in the valleys and 4,000 in the Altiplano). A total of 21,021 households has already been achieved (20,454 in the valleys and 567 in the Altiplano).
- **Agro-productive chains functioning in a sustainable manner.**
It is anticipated that there will be 20 chains by the end of the project (16 in the valleys and 4 in the Altiplano). Over these first two years the project has worked with 14 chains (11 in the valleys and 3 in the Altiplano).
- **Strengthened producer organizations.**
The goal is to strengthen 20 producer organizations by the end of the project (16 in the valleys and 4 in the Altiplano). The project has been able to strengthen a total of 14 organizations to date (12 in the valleys and 2 in the Altiplano).

The MAPA2 Project has two main components, the valleys and the Altiplano, and works to strengthen

the FDTAs in both regions and, within this institutional framework, to develop programs that increase the competitiveness and value of agro-productive chains.

During the second year of the Project, the team's activities concentrated on the development of 12 programs in the valleys and 2 in the Altiplano. This indicates that three new programs were included in the valleys zone (cut flowers, dairy, and high-value vegetables). In the Altiplano, the organic sweet onion program raised its operations to a semi-commercial level, with moderate advances due to MAPA2 funding limitations. Organic production grew from 5 to 15 hectares this year, and commercial exports were made to Los Angeles in the United States. Moreover, in the new opportunities program new technical processes for collecting and transforming quinoa flowers were established, and eight species were technically validated (lentil, garbanzo, turnip, carrot, pea, tarwi, maca and new quinoa varieties).

Results achieved in the Valleys component surpass set goals for the whole project, with the exception of the number of chains and strengthened organizations, both of which have ongoing results with numbers greater than those corresponding to the chronological progress of the project. In contrast, the numbers for results achieved in the Altiplano component are lower than planned. This is due to funding limitations for implementing projects over the first two years and to institutional and social limitations that have made it difficult to implement large projects, mostly in the Department of Oruro.

In both regions the 2007 agricultural year has been characterized by adverse climactic phenomena due to the presence of "El Niño." The effect of "El Niño" has mostly been evident in droughts in the Altiplano and high valleys and in flooding in the low and mesothermic valleys. The impact of floods and droughts on crops given priority by the MAPA Project will be extremely notable, in terms of the seasonal nature of the crops, in income increase indicators for the third year.

SECTION II

VALLEYS COMPONENT

DESCRIPTION AND MAPA2 OBJECTIVES

MAPA 2 works to strengthen FDTA-Valles in the following three key areas:

- It provides continual support in ensuring that administrative systems are efficient, effective, transparent, and consistent with USAID regulations and the FDTA's own operative procedures.
- It provides regular technical support for achieving excellence in implementing programs, and it furthers a smooth transition of Project skills and key personnel to the FDTA at the conclusion of the MAPA2 contract, and
- It supports the development of projects that can be used to increase its portfolio.

These activities are carried out in order to improve FDTA-Valles' ability to continue driving development "the MAPA way" at the conclusion of the present contract. This will be possible if it has the necessary human resources, organizational stability, and funding sources to properly fulfill its development role.

FDTA-Valles, together with the MAPA2 team, continues financing and supervising projects with financing from the Trust Fund established during MAPA1 and from other donors, such as the prefectures of departments in which it operates. The MAPA2 Project supports FDTA-Valles' work through technical consulting in administrative, financial, technical, communication, and marketing areas.

The present work plan concentrates on results and activities that will be carried out during the term in the following fields: agro-productive chain programs; organizational strengthening (FDTA-Valles, service providers and project beneficiaries); monitoring and evaluation; training and communication; and the environment.

PROGRAMS

This category includes activities carried out in the implementation of PITAs (Applied Technological Innovation Projects) and other events that seek to increase incomes and the sustainability of businesses related to specific agro-productive activities.

FDTA-Valles supports the development of programs in traditional chains, such as onion, chili peppers, peach, table grape, peanut, flowers, and tomato, and in non-traditional ones, such as spices, berries, and high-value vegetables. Furthermore, it operates a new opportunities program that carries out activities aimed at opening new markets and validating species with market potential. It also has another

program that compiles, processes, and distributes the prices of agricultural products found in wholesale markets.

Program results in terms of impact are presented in the following table:

IMPACT ACHIEVED BY PROGRAM							
Programa	Projects Concluded during MAPA2	Familias Benefited	Technology Adoption	Percentage of Crop Income Increase	Income/Family (Bs)	Cost/Family (Bs)	Return Index
Onion	9	5,261	71%	105%	2,960	1,479	2.00
Spices	3	933	96%	84%	178	5,221	0.03
Chili Peppers	5	2,635	76%	123%	1,114	1,966	0.57
Tomato	2	610	61%	389%	6,661	2,884	2.31
Table Grape	4	2,245	65%	86%	13,528	1,922	7.04
Peanut	6	5,046	60%	47%	2,872	1,136	2.53
Stone Fruits	4	2,144	59%	34%	588	2,192	0.27
Berries	4	576	77%	89%	800	7,489	0.11
Flowers		104					
Dairy		798					
Vegetables							
New Opportunities	1	102	n/a	n/a	n/a	n/a	n/a
TOTAL	38	20,454	65%	85%	3,389.06	1,889.76	1.79

Proposed results for 2008 are presented in the following table:

PLANNED RESULTS FOR FY 2008					
Program	No. of projects	Number of Complementary Activities	New Families Benefited	Technology Adoption Percentage	Percentage of Crop Income Increase
Onion	2	1	350	75%	15%
Spices	3		383	80%	25%
Chili Pepper		1	100	80%	25%
Tomato					
Table grape	2	1	450	70%	20%
Peanut	6	2	860	65%	20%
Stone Fruits	4		550	65%	15%
Berries	2	1	550	80%	15%
Flowers					
Dairy					
Vegetables	1		1.000	60%	25%
New Opportunities	2	2	350	50%	15%
TOTAL	22	8	4.593		

ONION

FDTA-Valles' onion program began with the first PITA in August of 2001, with the support of the MAPA Project. The program is aimed at introducing and developing harvest and post-harvest technologies, improving commercialization systems, and promoting the institutional development of the social stakeholders involved in the chain.

Figures correspond to the implementation and this and the other programs during the MAPA1 and MAPA2 Projects.

The various interventions of the onion program have allowed for the identification of an opportunity for producing organic sweet onion in the Bolivian altiplano. This has involved the perfecting of efforts

in production, post-harvest and marketing technologies, given the high level of sophistication of the three processes.

The onion program is the most important in FDTA-Valles' portfolio in terms of its relative weight in relation to other programs with regard to the number of projects implemented and underway, the total number of beneficiary families, and total investment. During the 2008 term the onion program will focus its efforts on two prioritized thematic areas:

a) Zone Graduation

The program has been working for more than five years in various municipalities in the Bolivian valleys, in which a high rate of technology adoption in integrated crop management and harvest and post-harvest practices has been achieved among project beneficiaries. Furthermore, their organizations have been strengthened and trained to provide services to their members with transparency and efficiency. Many of these organizations (Associations) are ready to offer direct technical assistance without the intervention of service providers. Furthermore, they are trained to continue offering marketing services through the channeling and standardizing their members' supply. It is anticipated that both services can form part of these organizations' regular activities and that, over time, the costs of technical assistance can be incorporated into the cost structure of marketing services. However, in the first stages of this new phase, called "graduation," FDTA-Valles will finance these services partially and in a decreasing manner, either directly or through the business Bolivia Produce, in addition to other organizational needs in complementary infrastructure aspects that still have not been completed. For this, a process will begin in surveying demand and preparing proposals on behalf the organizations. It is anticipated that in the first quarter of 2008 at least three new direct PITAs with grassroots organizations will have begun.

b) Marketing

Market access for the channeled and standardized supply of producer organizations requires two types of action. One is the promotion of this supply among traditional market stakeholders so that they can identify the advantages of a structured supply and receive it regularly from collection centers. This in turn will require from the program certain common activities for all PITAs. This sort of promotion activity will be principally directed at onion supply for open pollinated or local varieties.

The second type of action is in reference to the business Bolivia Produce. It must carry out the processes of purchasing onion that has been selected and packed by the organizations and marketing it in national and foreign markets. These activities will be directly linked to hybrid onions promoted by the program that still have not been completely integrated into the traditional commercial cycle in Bolivia and are directed at a segment of the country with greater buying power.

Both actions will be carried out by Bolivia Produce through a marketing PITA that will strengthen this business' activities and establish it as a regular stakeholder in the onion chain and as the sales branch for producer associations.

SPICES

This program has been operating since 2000. Until 2004 the program only had PITAs in the valleys of Chuquisaca. All of the interventions in Chuquisaca were co-financed with the Canadian NGO

SOCODEVI and through five agricultural cooperatives grouped in AGROCENTRAL LTDA (Central Office of Agricultural Cooperatives in Chuquisaca).

In 2005 the private enterprise UNEC S.A. was started with the equal participation of FDTA-Valles, SOCODEVI, and AGROCENTRAL. This business is responsible for producing vegetal material, providing technical assistance to producers, collecting, transforming, packaging, and marketing for spices, with an emphasis on oregano. Since September 2004 the spice program has had a project in the Department of Tarija, financed by FDTA-Valles' Trust Fund. This project copies the interventions from Chuquisaca.

During 2008 the spices program will focus its efforts on establishing the commercial operations of UNEC SA as a regular stakeholder in the oregano chain. Furthermore, during this term it must begin activities that promote the participation of the private sector in the chain, with emphasis in Tarija and Cochabamba, as a measure to ensure the sustainability and sustained development of this new industry.

CHILI PEPPERS

The chili pepper program encompasses three subprograms corresponding to the three crops of the same botanical genus – chili pepper, properly stated, hot pepper, and paprika. For each, PITAs and other activities are carried out in support of the chains.

This program is characterized by the integration of stakeholders from the three chains. Since in each of the links there were established and functional stakeholders, the emphasis of the program has instead been oriented on facilitating fluid relationships that would improve the nature of the businesses by increasing the quality and competitiveness of the raw material, increase the ability to channel supply, improve post-harvest systems, improve transformation processes, and, finally, promote technological innovation in marketing systems.

Among complementary activities, the 6th Annual Chuquisaqueño Chili Pepper Festival will be supported, with an emphasis on the Business Roundtable and the Chili Pepper Producer Summit. Importance will be given to helping the processed products supported by the MAPA Project, mainly ground chili pepper, hot pepper powder, and paprika pepper, gain access to international markets.

The 2008 term has three projects underway that support the productive and commercial phases of chili pepper in several municipalities of Chuquisaca and of paprika in the valleys of Santa Cruz. Among other actions that are to be supported in the course of this program, are the preparation of a chili pepper cultivation manual and the financing of a complementary action (counterpart activity to DER – Development of Rural Businesses and Business Development Services) for strengthening small entrepreneurial producers of vegetal material in order to, on the one hand, guarantee the quality and health of seeds and seedlings, and, on the other, plan and gauge production in accordance with market demands.

TOMATO

In spite of the notable income increases that have been attained, it has been decided to suspend the USAID-funded interventions of this program, mainly because of the high incidence of pests and diseases in this crop that requires a crop management mostly based on the intensive use of chemical products. Due to the pesticide use limitations stipulated by the donor and the mentioned pressure of pests and diseases on this species, it is very difficult to recommend technological packages that do not include the use of agrochemicals without affecting the competitive ability of project beneficiaries.

Therefore, the new interventions planned will be exclusively financed with resources other than the Trust Fund and at the explicit request of donors.

TABLE GRAPE

The table grape program, begun at the request of the MAPA Project, is oriented at increasing the incomes of traditional grape producers in the Bolivian valleys. The tradition of grape production in Bolivia (in general terms) comes from the Spanish colonial era, when vineyards were planted in different valleys under the influence of the Jesuit order, mainly in Cochabamba, Tarija, and Chuquisaca. The main production emphasis was on alcoholic drinks, such as wines and *singanis*. Grape supply for marketing and consumption as fruit was of secondary importance.

FDTA-Valles, with the support of the MAPA Project, recognized the opportunity to expand table grape supply on the basis of the large internal demand identified and its being met by external sources. Furthermore, it identified that the main variety cultivated, “Muscat of Alexandria,” could reach appropriate quality levels as a fruit with good management focused on improving clusters. This has been the focus of the program, and, in this framework, improvements have been made in the volume and quality of the table grape supply, making national production more competitive. Progress made in the program has signaled an opportunity for beginning short-term exports to MERCOSUR (Southern Cone Common Market). For this end, the MAPA2 Project initiated admission procedures for Brazil, which have been held up for over a year due to SENASAG’s limitations.

The 2008 term plans to provide continuity to the project in the Departmental Municipality and to support, through complementary actions (counterpart to DER), the establishment of rural businesses dedicated to producing vegetal material and the operation of harvest and post-harvest crews.

A new project will begin in the mesothermic valleys region, expanding the geographic coverage of this chain through financing managed by the FDTA with the Prefecture of Santa Cruz.

PEANUT

The peanut program began in October 2003. The factors that led to its being chosen over other chains are related to identified high internal demand, export potential, huge genetic diversity (given that Bolivia is one of the centers of peanut origin), high agro-ecological adaptability, easy adaptability to the production conditions of small farmers, water balance conditions in relation to the regimens of most of the country’s valleys, and, finally, its short cycle.

The first projects were focused on validating germplasm with characteristics attractive to markets and on harvest and post-harvest technological innovation. The results of these first PITAs have allowed for regular contacts to be established with export businesses and for export demand to grow from year to year. Furthermore, local demand has been assessed.

The peanut producer summit will continue to be organized, as well as specialized consultancies. In both cases, benefits will be spread among program participants.

The emphasis of the peanut program in 2008 will be on establishing production processes under the Integrated Crop Management (ICM) program and promoting the adoption of the technological package for organic peanut production (in potential zones). Moreover, the program will continue promoting commercial relationships between producer organizations and national businesses.

The 2007-2008 term will provide continuity to projects underway, with the financing of six PITAs and

two Complementary Actions (counterpart activity to DER). The later will be directed at strengthening the producer associations of Mizque and Mairana (the most advanced in the program) in collection and processing infrastructure. For this, the Municipality of Mizque has committed its counterpart financial contribution to the complementary action, making it the first municipality to provide funding directly to technological innovation investments.

STONE FRUIT

The stone fruit program is comprised of the peach, plum, and apricot chains, crops that are practically found in all the Bolivian valleys. Initially the MAPA Project did not consider including these fruit trees in its interventions; because of the necessity of generating short-term results, annual crops were mainly chosen. However, pressure from producers, organizations, and local governments influenced the decision to include a program that works to improve producer income through technological innovations in the mentioned crops.

The program places most of its attention on peach, since this crop is the most common and has the greatest demand of the three. Analysis of the peach chain has shown that three levels of farming exist in Bolivia. The first is basic and does not use commercial orchards or varieties. Instead, producers basically use peach trees to mark off their land and collect fruit when in season. In this case, production is similar to wild tree species that are not managed. This situation is common in most of the Bolivian valleys.

A second level is that of semi-modernized commercial orchards. In these cases, commercial orchards exist that use sowing technology and obsolete management technology. There is no varietal consistency, and varieties are obsolete. The majority of the orchards of Cochabamba and Santa Cruz fall into this category.

Finally, there are commercial orchards that use appropriate technology. There are fewer of these, and they are mostly concentrated in some units in the valleys of Cochabamba and Santa Cruz. The interventions of the stone fruit program are focused on taking producers to the modernized commercial orchard level. Technological innovations incorporated into the PITAs vary according to the levels found at the beginning of the project.

With regard to the action begun in the valleys of La Paz, a second phase of attention is planned in 2008, for which respective demand survey workshops have been carried out in the mentioned municipalities that have confirmed the interest of potential project beneficiaries.

The 2008 term plans to continue activities in the Department of Tarja. To this is added the possibility of incorporating funding from the GTZ Advisory Energy Project and DER with which the use of family owned dehydrators can be widely promoted.

BERRIES

This program is made up of a group of fruits that includes strawberries, mulberries, blackberries, raspberries, and blueberries. FDTA-Valles' berry program has focused on raspberry crops and, to a lesser degree, on blackberries and blueberries.

None of these three species had been cultivated commercially in the country, and, therefore, there was no cultivation tradition or available technology. However, the opportunity of entering international markets in MERCOSUR and increasing consumption in the country, added to the potential of obtaining harvests in short periods, motivated this program to be established in the three mentioned

chains.

The bankruptcy of the main Bolivian airline, LAB, and the instable operations of other airlines forced raspberry export levels to Brazilian markets to be reduced, for which reason the fruit supply had to be directed at national markets. Since the air transport situation does not seem to have a simple solution and air transport is the only option for raspberry due to its highly perishable nature, it was decided to limit the development of cultivation areas to those already existing and to focus project maintenance and support activities on establishing this fruit in the national market. Therefore, interventions in this chain in 2008 will be modest and focused primarily on the Department of Tarija. Furthermore, FDTA-Valles will continue with a program in validating blueberry, financed by the Prefecture of Tarija. Continuity will also be given to the technological innovation project by directly contracting AFRUTAR (Fruit Producers Association of Tarija) to assume the management of the program from the 2008 term onward. The allotment some funding has been considered for a complementary action that would strengthen and establish AFRUTAR's role, as well as activities that promote and support marketing, once this project concludes.

NEW OPPORTUNITIES

This program has been the means for validating species and varieties for which market opportunities have been identified but competitive potential has not been proven.

This program has operated through local "collaborators," meaning farmers that have carried out validations in their fields with technical monitoring from MAPA and the FDTA. This program has imported 28 species and 151 varieties, including raspberry, blackberry, blueberry, litchi, longan, colored cala lilies, lisanthus, lily, kangaroo paw, Kansas feather, proteas, sunflower, trachellium, pine nut, onion and pea. The possibility of planting commercially crops has been validated, and in some cases new programs have been created, such as in raspberry, blackberry, colored cala liles and kangaroo paw.

The program also concentrates on the propagation of successfully validated material in order to generate the critical volume necessary for establishing commercial production units.

As can be noted, the program does not generate a direct impact on farmer income, but rather generates alternatives that could themselves become programs.

In 2008 the program will continue with the third phase in validating and developing propagation protocol for in vitro colored cala lilies. This activity is being financed by the Trust Fund and has demonstrated promising results. Furthermore, validation processes for species and varieties with high market potential, mainly in the areas of flowers, vegetables, and peas/beans, will continue.

CUT FLOWERS

In 2007 a project began in the Bella Vista zone of the Municipality of Quillacollo in Cochabamba. For the 2008 term, the monitoring of project implementation is planned, as well as the ensuing final evaluation in October.

VEGETABLES

In accordance with the planning carried out for 2007, a project began in the Central Valley zone of Tarija. This project will continue until April 2010, and it will be monitored and advised in its implementation in the 2008 term.

CROSS-CUTTING ACTIVITIES

THE ENVIRONMENT

The policy of the MAPA2 Project is to improve the quality of life of producers, increasing product production and quality mainly by promoting the adoption of new technologies through the FDTAs.

On the basis of this comprehensive policy and MAPA's experience, the Environmental Policy of the MAPA2 Project is aimed at promoting new technologies based on the sustainable and rational use of natural resources, both on the farm and in transformation processes, and, in this way, at stimulating farming that is competitive in the market and that abides by national and international environmental standards.

Intended Results for this Plan:

- Update and distribute the PERSUAP.
- Distribute the IPM manual.
- Prepare and distribute a Good Agricultural Practices (GAPs) and Safer Use of Pesticides (SUP) manual for technicians and producers.
- Training in the proper and safer use of pesticides for technicians and producers involved in the programs and projects supported by MAPA2.
- Prepare and distribute crop manuals (for involved programs) that give priority to responsible environmental management processes in integrated crop management.
- Internal evaluation of the environmental management of the MAPA2 Project.

SIMA

SIMA (Agricultural Market Information Service) is a daily activity that compiles, processes, and distributes the prices of agricultural products in wholesale markets. The objective of the service is to facilitate decision-making for different stakeholders with respect to their participation in agro-productive development. SIMA was declared the Official Wholesale Price Information Service by the Bolivian Ministry of Agriculture on October 28, 2005 by Ministerial Resolution No. 214 of October 28, 2005.

Prices are processed daily in order to obtain low, medium, and high values, and from these reports are produced. The system registers the prices of those products with movement in the wholesale market during the day through the use of a Commodity Price Database (CPD). Information is gathered from markets in Sucre, La Paz, Cochabamba, Tarija, and Santa Cruz at the national level, and from Arequipa, Peru and Salta, Argentina at the international level. This work is carried out by eight reporters in their respective markets.

It is anticipated that an Internet version will be available during the 2007-2008 term so that any individual could have access to data on the web and retrieve information as needed. A preliminary, trial version is currently available in English. It is expected that coverage will be extended with new national and international markets.

DER

During the 2007 fiscal year the main activities in the area of DER were directed at implementing support projects and improving the skills of business development service (BDS) providers. With regard to the development of rural businesses, activities were directed at developing business plans, the evaluation of those plans, and loan approval management.

In this context, 31 business plans were finalized, of which 26 were presented and approved by the Sub-Component 3 Steering Committee of Programmed Sector Support to Agriculture (APSA) Phase 2. Two business plans were not financially viable, and the rest did not request DER co-financing. Of the 26 requests for support, only 12 progressed to implementation, due to the fact that the others were not able to authorize the use of funds for making counterpart payments. Anticipated for 2008 are the preparation of eight new business plans and the start of at least thirteen projects, among which are those pending from 2007 and new ones to be identified in 2008.

MONITORING AND EVALUATION

This area includes collecting data, the preparation of data and reports, and the development of storage and analysis systems. In this field MAPA carries out some activities of routine nature and other occasional ones.

The totality of these activities is conducted in an integrated fashion between the teams of FDTA-Valles and the MAPA2 Project.

TRAINING AND COMMUNICATION

The MAPA Project operates together with FDTA-Valles in these areas. As in the case of monitoring and evaluation, some activities are routine, although most arise at the need of programs and at the direction of the Project and the Foundation.

In the area of routine activities are quarterly reports, the preparation of “success stories,” and “Board of Directors Training” workshops that are given to the FDTAs of SIBTA annually.

In the area of nonrecurring, programmed activities is the preparation of crop manuals. During this year manuals were completed for oregano, anise, cumin, and chili pepper.

During this term the transition from the current Chief of Party (COP) Bruce Brower to Enrique Rivas is expected.

The FDTA-Valles team will receive technical assistance in various areas from MAPA2 personnel indicated below, under the general coordination of the COP of MAPA2, continuing activities with the unified team created within MAPA:

- Rodrigo Daza in production and environmental areas.
- Alina Arévalo in agribusiness and commercialization areas.
- Paul Meruvia and Claudia Sainz in agricultural production and project management areas.
- Eduardo Velarde in monitoring and evaluation areas.
- Lily Alvéstegui in vegetable and flower production areas.
- Werner Munckel, electro-mechanics specialist.
- Marina Paz and Mónica Méndez in financial and management areas.
- Roxana Gumucio in event coordination areas.
- Susana Munckel and Ivana Alandia in administration and funding areas.
- Brichitt Vargas in market information and library areas.
- Julio Morales, Amadeo Rojas and Juana Villca in general services.

DEVELOPMENT OF AGRO-PRODUCTIVE CHAINS IN THE ALTIPLANO

DESCRIPTION AND MAPA 2 OBJECTIVES

The results achieved by the MAPA Project have allowed USAID/BOLIVIA and the Bolivian Government to support the implementation of a new five-year phase, which began in October 2005 and will conclude in September 2010.

This new phase does not include interventions in the Yungas area. Instead, it does deem it necessary for the project to have a component supporting activities that develop agribusinesses in the Bolivian altiplano (in the Departments of La Paz, Oruro, and Potosí), in addition to providing support to FDTA-Valles' activities in the Bolivian valleys.

In this framework, an operative structure was decided upon for the altiplano region. This structure will be directly related to the rest of the Project's technical team, who will also provide specialized support in marketing, agribusiness, the environment, machinery and equipment, as required by the Altiplano program. As with Valleys component, programs will be organized in the altiplano that are aimed at increasing the income of beneficiary farming families.

Results that are expected for 2008 are presented in the following table:

PLANNED RESULTS			
Program	No. of Projects	New Familias benefited	Technology Adoption
Organic Sweet Onion	1	600	Organic Production, commercialization (national and external markets)
Quinoa Flower	1	167	Production, freeze-drying, commercialization
Fava Bean	1	360	Storage, commercialization
Carrot	1	400	Harvest, Post-harvest, and commercialization
Bio-Inputs	1	600	Production and commercialization
TOTALS	5	1.527	

The 600 families that participate in the onion program are the same ones from the bio-input component.

PROGRAMS

ORGANIC SWEET ONION

This program has come into existence as a result of interventions in the onion chain with FDTA-Valles. Since among validated varieties there were some that showed a low level of pungency, the MAPA Project began negotiations with one of the main onion importers in the United States.

During 2004 and 2005, a project each was financed for the production of sweet onion in the altiplano, with suitable results in agronomic terms and modest ones in commercial terms, mostly due to the country's logistic limitations. During 2006, a project was financed in the production of organic sweet onion in the Pasto Grande farm, a community located in the Department of Oruro. This experience demonstrated the viability of producing this type of onion commercially in this zone of the country, mainly because conditions make it difficult for pests and diseases to survive during the winter. Based on these results, a new activity was financed in 2007 with anticipated results in institutional (creation and establishment of a business made up of farmers), farming (planting 15 hectares with organic sweet onion), and commercial (marketing of 100% of production in nationally and abroad) areas.

The following table presents this activity's accomplishments

ACHIEVEMENTS OF THE 2006 – 2007 AGRICULTURAL SEASON	
A business (Bolivia Produce SA) established and operating	1
Municipalities benefited	6
Familias benefited	567
Hectares under commercial production of organic sweet onion	20,8
Income generated by the sale of organic sweet yellow and red onion in the national market and exported to the United States	Bs. 931.084
Payment to organic sweet onion producers (Bolivian Valley and Central Altiplano). Benefits generated by manual labor, onion sales, and farming investments.	Bs. 1.109.853

For the 2008 term, an allocation was made to Bolivia Produce SA, representing 50% of the value of the project, for producing and marketing organic sweet onion in the Bolivian valleys and altiplano. The anticipated results for this allocation are the following:

Agricultural Production Component

Planting of 53ha of sweet organic onion by project beneficiaries (26.5 ha in the altiplano and 26.5 ha in the valleys) under a Good Agricultural Practices (GAP) system in the 2007-2008 season.

Attainment of a 10t/ha yield for organic sweet yellow and red onion per project beneficiary in the 2007-2008 season.

Post-harvest Component

Selection of 40% of the yellow and red organic sweet onion bulbs for export, conducted in a packing center under a Good Manufacturing Practices (GMP) system by temporary workers contracted by the business during the 2007-2008 season.

Marketing Component

Export of 19,527 boxes of organic sweet onion, at 22kg per box (13,018 boxes of yellow and 6,509 boxes of red), that are certified by the NOP (USDA National Onion Program) and US Regulations and are destined for the United States market during the 2007-2008 season.

Marketing 25,776 bags of organic sweet onion, at 25kg each (17,184 yellow and 8,592 red) nationally.

Institutional Strengthening Component

Creation of 4,415 salaries in the Bolivian Altiplano for work related to production, post-harvest, and packing of organic sweet onion.

Generation of a gross income of Bs. 5,433,388 from exported organic sweet onion (at an exchange rate of 7.95 [Bs/US\$])

Generation of a gross income of Bs. 644,400 from the sale of organic sweet onion in the national market.

QUINOA FLOWER

The project's objective for 2008 is to increase income for a number of farmers through the commercial production of quinoa flowers for the national market and for export.

Anticipated Results, 2008

In this sense, it is expected that the following results will be achieved:

Sowing of 30ha of quinoa for flower production.

Sowing of six lines of quinoa for cut flower and grain production.

Determination of optimal harvest time for the flowers.

Establishment of a collection system for quinoa panicles.

Implementation of two transformation centers for quinoa panicles, one in the Department of Oruro and another in the Department of Cochabamba.

Processing of 150,000 quinoa panicles. One hundred thousand panicles have been marketed nationally and internationally.

FAVA BEAN

The project's objective is to increase the economic income of fava bean producers in the municipalities of Puna, Caiza-D of the Department of Potosí, as well as fava bean producers from other regions.

Anticipated Results, 2008

Results anticipated by component are the following:

A. Implementation of Infrastructure and Equipment Component:

- Between December 2007 and March 2008 the construction of three storage silos for first, second, and discard quality fava beans for export. Equipment will be purchased and installed in order to modernize fava bean processing.

B. Storage and Conditioning of Conventional Dry Fava Bean Component:

1. – Collection and conditioning of 150t of first rate dry fava bean and another 150t of
2. second rate bean by permanent and temporary specialized personnel under GMP systems in the 2007-2008 season.
3. – Reclaiming of 60t of dry fava bean discarded in the conditioning process due to physical
4. conditions or quality for transformation under GMP systems in the 2007-2008 season.
- 5.

C. Transformation:

6. – Development of competitive, sustainable products by a food technology specialist
7. contracted by the project, with regard to a market study and marketing plan, in the 2007-2008 season.
8. – Design and layout in the Puna industrial plant for machinery and equipment, transformation production processes, and GMPs by an industrial process specialist
9. contracted by the project during the 2007-2008 season.
10. – Production of 60t of transformed products by permanent and temporary workers under
11. GMPs during the 2007-2008 season.
- 12.

D. Marketing Component:

13. – Marketing of 300t of first and second rate dry fava bean with health certification from SENASAG and SGS quality verification for export to the U.S., Japan, Spain, and France through strategic alliances with GRACE and PROCESADORA S.A. during the 2007-2008 season.
14. – Marketing of 60t of transformed fava bean products with an emphasis on providing pre-cooked fava bean flour to manufacturers such as La Francesa and San Gabriel for the preparation of cookies for school breakfasts during the 2007-2008 season.
15. – Shipment of samples of developed transformed products.
16. – Preparation and application of a market study and marketing plan for products.
- 17.

E. Organizational Strengthening Component

18. – Generation of a gross income of US\$ 120,000.00 from exported first rate fava bean.
19. – Generation of a gross income of US\$ 78,000.00 from exported second rate fava bean.
20. – Generation of a gross income of US\$ 48,000.00 from exported transformed fava bean.
21. – Implementation of management systems with an entrepreneurial vision.
22. – Readjustment or modernization of ASOHABA's (Association of Fava Bean Producers)
23. strategic plan
24. – Implementation of an administrative, accounting, and financial system that is appropriate for ASOHABA's activities in order to have information that is timely, integral, and reliable.
- 25.

F. Validation of Organic Fava Bean Production Component:

- a. Validation of 10ha of fava bean under organic management.
- b. Creation of organic production technology for fava bean.
- c. Certification of 10ha with IMO-Control.

BIO-INPUTS

The project's objective is to strengthen the production capacity for bio-inputs and marketing in order to support organic production.

Anticipated Results, 2008

Anticipated results are the following:

1. Improve conditions for organic production by 20%.
2. Supply bio-inputs to provide 100ha with high quality products.
3. Increase the production of Fertitrap, Biofert, Fertisol, Fungitop and Acaritop by at least 50%.
4. Have the volumes required by Bolivia Produce available at the times and in the quantities required.
5. Support clean food production.
6. Decrease the use of agrochemicals by 100%.
7. Reduce harmful effects on the environment by 100%.
8. Create employment through the use and marketing of bio-inputs.
9. Diminish the costs of conventional agriculture; protect the health of users and the environment.

CARROT

The objective is to improve the net income of 400 families dedicated to the production of carrots in the central altiplano through improvements in harvest, post-harvest, and packing and the promotion of structured carrot marketing in national markets by strengthening organizations.

Anticipated Results 2008

- Improve the income of 400 agro-entrepreneurs by 15%.
- Reduce harvest and post-harvest loss by 20% of production per hectare.
- Introduce and market carrot that has been washed and sized in 25kg mesh bags.
- Strengthen carrot producers in the Altiplano.
- Process 250t of carrot with harvest and post-harvest technology.
- Put one collection center with a post-harvest system (sorting, sizing, and packing) into operation.
- 5,000 mesh, 25kg bags marketed in wholesale markets.
- Four contracts signed with national wholesalers.
- 150 agro-entrepreneurs, retailers, carriers, and technical personnel trained in topics related to marketing.
- One carrot producer organization established, strengthened, and legally recognized.
- 30 members from various communities trained and actively participating.

- 30 members trained in negotiating price, volume, and quality.

OUTPUT INDICATORAS FOR MAPA2: 2007 FISCAL YEAR

The principal minimal results anticipated for the support provided by MAPA 2 to FDTA-Altiplano by September 30, 2007 are the following:

- 1,527 agro-entrepreneurs with access to technology.
- 1,527 agro-entrepreneurs with access to market services.
- One producer organization strengthened.
- Four projects underway.