

2007 University of Puerto Rico Extension Annual Report

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I. Report Overview

1. Executive Summary

The following accomplishment report covers the period from October 1, 2006 to September 30, 2007. During this fiscal year, the Puerto Rico Agricultural Extension Service (PRAES) used a total of 195.20 FTE's. PRAES signed multiple agreements and/or made collaborative efforts throughout the island during this fiscal year. Public entities non-profit organizations; public and private universities in and outside of Puerto Rico; local, state, and federal organizations; community organizations; radio and television stations; and the press participated with PRAES to achieve various goals ranging from agriculture to family and community concerns.

PLANNED PROGRAMS

Animal Production and Animal Protection

The livestock sector represents 28% of Puerto Rico's gross agricultural income (Statistics of the Puerto Rico Department of Agriculture for FY 2005-2006). It is comprised of the following enterprises: dairy and beef cattle, swine, poultry (broiler and laying hens), fish and shrimp, rabbits, goats and sheep.

During FY 2006-2007, 400 farmers, farm workers, government and animal industry related professionals were trained on animal production practices. Of these, 125 increased production after adopting the recommended practices.

Field days and short courses on reproductive management and genetic improvement of animals were offered to farmers. As a result, 65 farmers improved their animal production practices.

A publication on nutrient utilization to improve animal performance and to reduce waste disposal was distributed among Extension agents and farmers. One hundred and fifty (150) persons improved the nutrient utilization practices in their farms. Several farmers revised their waste management plans according to present regulations.

On-site farm visits were used as the main method of evaluating farm production techniques as a means to improve the quality of animal products.

PRAES oriented farmers on the importance of maintaining the farm animals in good health. Practices such as keeping the farm facilities clean, establishing a vaccination program, keeping the animals by age groups, and bio-security were promoted among farmers.

Eight hundred and eighty nine (889) persons adopted disease control and prevention practices.

An alliance was established between PRAES, the USDA Veterinary Services, the Puerto Rico Department of Agriculture, and the Department of Health to orient the entire population on steps to follow in case of finding or observing any sign of diseased animals in their backyard or on their farm. Fifty-eight (58) persons adopted a bio-security program on their farms.

Crop Protection and Crop Production

An economically profitable and progressive agriculture requires efficient plant management and good pre-harvesting management practices of produce to obtain excellent quality and better utilities. Crop production is the second most important economic area of Puerto Rico's agriculture. There was an increase in value of crop production (4.3 million) as compared to fiscal year 2005-2007.

One hundred and ninety-nine (199) farmers adopted new value-added practices in crop commodities. As a result, they increased the profit from their products and were able to sell a larger amount of the products in the fresh market.

One thousand one hundred and forty-seven (1,147) farmers increased the quality of their crop commodities. Seven hundred and twenty-one (721) farmers increased their income after having adopted one or more of the plant management systems practices.

The plant protection planned program promoted the adoption of the best management practices to develop IPM systems that protect the environment, conserve the natural resources, and contribute to the competitiveness, profitability and sustainability of Puerto Rico's agriculture.

PRAES agents trained 1,003 farmers on pesticide use and IPM program and on pests of economical importance that affect the profitability of plantain, bananas, vegetables, and ornamentals.

Extension Agents trained banana and plantain growers on the identification and management of Black Sigatoka using educational materials developed by the starchy crops and plant pathology specialist.

Demonstrations about the identification and management of key pests in cilantro and culantro were conducted in three hydroponic nurseries. These nurseries were used as pilot projects to demonstrate the benefits of IPM practices and to promote their identification.

The plant protection planned program continued collaborating with the USDA Forest Service to assist forest nurseries and personnel of state agencies related to forest management through the development of an educational program in IPM.

During FY 2006-2007, 2,043 farmers completed a training program on pesticide application and 2,477 persons were trained on commercial pesticide application.

Engineering and Biosystems

In Puerto Rico, most of the farms have structures and waste management systems as part of their infrastructure; many of which are old and were built without permits. In addition to reducing the risk to human life in many of the existing structures, new structures have to follow efficient engineering practices and comply with the permit requirements of the Puerto Rico Building and Regulations Authority, the Environmental Quality Board, the Department of Health, and other agencies.

During FY 2006-2007, 82 collaborations were established with different government agencies in Puerto Rico to improve engineering and biological systems infrastructure. Seventy-nine (79) persons adopted one or more of the recommended practices to increase the efficiency of their structures and comply with all permits. Seventy-five (75) farmers improved their structures and/or complied with permits; as a result, they have legalized their projects and qualify for government incentives and lower insurance rates. They are also in a better position to face problems associated with urban expansion and complaints from neighbors.

Seventy (70) waste management systems and 92 plans and specifications for model structures were designed. Two demonstration facilities were established.

Economics, Marketing, and Policy

Through the Economics, Marketing, and Policy planned program the farmers received the necessary education and technical assistance to strengthen their abilities as managers and entrepreneurs. The program provided intensive assistance in keeping records and evaluation of alternatives, tax management approaches, accounting methods, enterprise budgets, credit and income statements, inventory, agricultural risk, marketing strategies, and policies analysis.

Forty-five (45) farmers and agricultural entrepreneurs adopted one or more economic practices; 15 used economic tools to make effective economic decisions to improve their business.

Management of Rangeland and Forestry Resources and Soil, Water and Air

PRAES and USDA-NCRS joined efforts to promote the management of rangelands. These collaborative efforts were directed toward the development of educational activities geared to the implementation of the recommended practices to protect the natural resources and the best management practices to use during farming.

PRAES specialists in urban forest, plant pathology, and pest protection joined efforts to promote urban forestry through workshops, trainings, and radio programs.

An educational campaign on the prevention of forest fires was conducted and a curriculum on forest fires for school students was developed.

Two hundred and seventy-eight (278) persons adopted one or more practices on natural resources and forest conservation. They established 25 reforestation projects around the island, with the participation of PRAES and federal and state government agencies.

PRAES developed educational campaigns to encourage the reestablishment of green areas and forests in urban and rural communities.

The main goal is to train farmers on the appropriate management of soil, water, and air resources increasing yield and preventing contamination.

Several collaborations related with the Soil, Water and Air planned program were established with different government agencies during FY 2006-2007. The guidelines of the regulatory laws for water quality were compiled and distributed among the agricultural agents.

Nineteen (19) farmers adopted the recommended practices for air and water quality, and 78 farmers complied with the soil, air and water regulations.

Three hundred and fifteen (315) farmers adopted fertilization practices. They used the soil analysis results to apply fertilizers due to the increase in costs of the fertilizers and their concerns about contamination.

Families and Children

The family structure in Puerto Rico has changed with important implications for our children. PRAES developed educational programs to empower families to nurture, support and guide their members throughout their lives and to motivate them to improve the quality of life and well-being.

The family life specialist developed workshops, curricula, and trainings in successful parenting, character traits, values, family strengths, aging aspects, and life silks for families, children, youth and elderly people.

One thousand two hundred and ninety-two (1,292) persons reported improved parenting skills. One hundred and twenty-one (121) volunteers/community leaders demonstrated their adopted skills by teaching and or training others. Two thousand one hundred and ninety-eight (2,198) persons increased their knowledge through educational material and other resources distributed through campaigns and other educational methodologies.

Curricula were developed and implemented. The proposal PR Empowers Parents to have Successful Children-NH was approved and implemented during FY 2006-2007.

Food Safety

The goal of the Food Safety Planned Program is to improve food safety through the control, reduction or elimination of contamination risks.

Consumers who attended the food safety courses achieved the knowledge on proper food handling practices. PRAES home economists offered Fight BAC! courses with a minimum of four lessons to 941 consumers. Ninety-one per cent (91%) of these consumers adopted one or more safe food handling practices. Among these practices were: wash their hands frequently and clean and disinfect the surfaces in contact with food, more than 90%, and use a food thermometer to measure internal food temperatures, 40%.

In order to comply with the Food Code 2005, persons in charge of food establishments shall demonstrate knowledge on different food safety topics to the regulatory authorities.

Ninety-two per cent (92%) of the 3,274 FSCC participants that completed the course approved the certification exam with a score of 70% or more; more than 47%, wrote a plan to control the temperatures of potentially hazardous foods and keep records.

Healthy: No matter what my size or income

This planned program was based on the idea that a healthy body feels good and looks good "No matter what its size". The curriculum "Healthy: No matter what my size or income" was developed in the summer and fall of 2007 and the home economists were trained in November 2007.

Three thousand seven hundred and twenty seven (3,727) persons completed the courses using material related to the Food Guide Pyramid for Puerto Rico, which was introduced in the fall of 2006, and material of "Complete you meals with milk" campaign. An additional 1,117 people were oriented on farmer's markets.

Eighty-two (82) community volunteers taught courses in this area and collaborations were established with 248 other entities.

As a result, to the different courses, 1,418 people increased their consumption of vegetables, 1,767 consumed milk with their meals, and 1,126 persons recognized that they can prepare a meal for their family and for themselves.

Human Health and Well-being

Health and disease have been the main concerns of humans since antiquity. PRAES continued working in different partnerships with health and human services agencies to focus on collaborative efforts on the development of programs aimed at the promotion of health and the prevention of disease. We promoted healthy lifestyles for people in both rural and urban areas, and addressed high risk factors through the prevention and early detection of diseases, the prevention of injuries and disabilities, and the appropriate use of the health care system.

Of 1,671 children who completed non-formal health promotion programs, 1,528 adopted one or more of the recommended practices after completing one or more of the programs. The practices adopted were as follow: 193 children acquired skills in identifying and rejecting sexual abuse, 298 youth reported having acquired skills using assertive response to peer pressure, and 1,088 developed a personal hygiene program. In the area of drug prevention, 41 children reported they acquired skills to deal with negative peer pressure.

Through physical activity education programs, 414 adults began to do 30 to 60 minutes of physical exercise on most days of the week and 485 incorporated physical activities to their lifestyle. Two hundred and eighty-three (283) youth reported participating in organized physical activity.

Of 460 adults oriented in risk reduction and safety, 432 acquired skills and modified attitudes and practices related to injury prevention at the home, 444 adopted practices to prevent poisoning, 372 prepared a first aid kit, and 400 demonstrated the steps to make a call to the emergency services (911).

Consumer Education and Individual and Family Resources

Financial education is an area that has gained interest among the public in recent years. The goal of the Consumer Education and Individual and Family Resources planned program is to increase the financial well-being of the consumers through knowledge, skills, and self confidence in competencies such as: how consumer behavior influences decision-making, budgeting, debt reduction credit-wise, savings and investment.

Five hundred and seventy-five (575) persons completed the consumer education course and 381 completed individual and family resources management courses. Three hundred and fifteen (315) consumers prepared an individual or family budget. One hundred and eighty one (181) consumers prepared plans to reduce their credit card use and 206 adopted debt reduction.

Collaboration or coalitions were established with the Department of Consumer Affairs, the Department of Education, Consumer Credit Counseling, the IRS, and others.

Strengthening Youth Life Skills, Leadership, and their Community

The Puerto Rico Four-H and Youth Development program has identified youth development as a major area of emphasis for its long range educational program.

This area is designed to provide youth with positive opportunities to learn and interact with peers and adults, provide leadership development, and focus on the enhancement of life skills through research-based educational programs. These programs emphasized the development of like skills for the prevention of negative high risk conduct.

Two thousand six hundred and forty (2,640) trainings and workshops in liked skills and subject matter were offered. Two thousand and nine (2,009) children and youth reported having improved their decision making skills, and 1,256 reported improved communication relationships with their parents and peers.

Two hundred and thirty-nine (239) children and youth developed and established a community project to address a particular

issue and 179 youth volunteers conducted community services programs.

Community Resources Development and Empowering and Self-management Communities

The Community Resources and Development planned program focuses on the delineation of an effective program that goes beyond training activities centered on specific careers or job areas.

During this fiscal year, 223 persons were trained on community-based businesses. As a result, 39 persons applied the recommended practices in the process of developing a community-based business and two community-based businesses were established.

The planned program Empowering and Self-management Communities focuses its efforts to attending the social and economically disadvantaged communities training leaders in community organizations and fostering empowerment and self-management.

Thirty-eight workshops on community organization and empowerment were developed, 47 communities were organized, and 729 leaders participated actively in the design and implementation of community projects.

EVALUATION OF MULTI STATE AND JOINT ACTIVITIES

1) How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

In the Agriculture, Marketing and Natural Resources (AMNR) program area, PRAES agents and specialists, together with personnel of the Puerto Rico Agriculture Experiment Station, participated in 12 enterprise commodities' meetings. Extension personnel presented problems identified by our farmers, such as: the necessity of structures for farms, fertilization practices, pest control, new varieties, waste disposal, and marketing techniques. To address these issues, several educational strategies were developed. One of the major efforts was the identification and establishment of an integrated pest management program to reduce the incidence Broca in coffee. Training meetings for farmers and non Extension employees were conducted in coordination with Experiment Station personnel. Other issues were jointly identified through multidisciplinary collaboration with other program areas, including the public discussion of the Plan of Land Use and the Milk campaign for consumers.

In Four-H and Youth Development program area, effective communication with youth, volunteers, and staff provides us with the opportunity to evaluate and reflect on ways to design a responsive program at the local, regional and state levels. The PRAES Four-H program meets regularly with stakeholders, enables a merit review process, and keeps an ongoing youth consulting. The participants have the opportunity to address the issues that they understand the program must enhance or make a priority in different 4-H activities/event. Issues presented by the 4-H youth are evaluated by the 4-H staff to be included in the educational programs.

In the Community Resources Development program area, stakeholders' needs, identified by community leaders as well as by Extension Agents, have resulted in the improvement of educational material (a new curriculum in the area of economic development is underway) and a new community initiative called "Land and Sea Alliance". A second initiative "Communities to the Rescue of their Lands" is underway.

The Family and Consumer Sciences program area also worked in the stakeholder input process with low-income families. As a result, the program has continued to strengthen the curriculum on family relations and parenting.

2) How will the planned programs address the needs of under-served and under-represented populations of the State?

The AMNR program area has several projects to assist the underserved farmers, including the small farmers' outreach training and technical assistance project, sustainable agriculture, and the Plants Diagnostic Clinic. The small farmers' outreach project is targeted to those farmers that are borrowers of the Farm Service Agency. Low-income farmers that need to learn about farm administration participated in the courses. Eighty-one (81) farmers benefited from the project in different municipalities. In addition, small farmers received special attention at the Plants Diagnostic Clinic, where samples of diseased plants from their farms were analyzed at no cost. IPM practices are primarily used to make the recommendations.

The Four-H and Youth Development program area emphasized on activities where under-represented audiences could participate. The program developed special activities targeted at handicapped 4-Hers. The first State Day for Very Important 4-Hers allowed 150 handicapped participants the opportunity to learn and interact with peers and adults. As a result of this effort, we identified experts and partners to support our work for kids with disabilities. One of our first coalitions is with the Puerto Rico Golf Association. We will begin the use of golf to improve youth life and their environment (natural, physical, and social) of the handicapped 4-Hers of the public school system. Among these, are a group of deaf children whose role model to emulate is the renamed golfer Kevin Hall and his success in golf and in his life. These children will eventually participate in the First Tee's Life Skills Experience. In order to better address the needs of this under-represented audience, all young adults and adults participating in the project will be trained on: Four-H Mission and Philosophy, Working with Handicapped Youth, and Sign Language.

To attend the needs of low-income families, a new CYFAR project has been implemented in municipalities where families at risk are a priority. Planned programs in the area of Family and Consumer Sciences continue to work in close collaboration with other agencies and organizations such as the Food Safety Consortium, the Department of Health, and the Department of Consumers' Issues in order to better address the needs of these underserved audiences.

3) How will the planned programs describe the expected outcomes and impacts?

Planned programs will describe the expected outcomes through the outcome measures and impact statements. In terms of multi-institutional activities, several collaborations have been established with other universities and non-university institutions. One of these is the collaboration between Sea Grant and PRAES with the initiative "Land and Sea Alliance", which promotes community involvement in environment and resources conservation issues. In addition, collaborations with diverse institutions including the Puerto Rico Department of Natural and Environmental Resources, the US Forest Service, and the Caribbean National Rain Forest have resulted in diversification of the environmental educational offers and in activities that are more dynamic for the youth. Collaboration with the Puerto Rico Department of Transportation and Public Works and the Puerto Rico Department of Education resulted in improved outcomes in the area of safety. In agriculture, continued collaboration with NRCS, the Puerto Rico Department of Agriculture and the Puerto Rico Agricultural Experimental Station has resulted in a sustainable agricultural project developed for coffee farmers.

4) How will the planned programs result in improved program effectiveness and/or efficiency?

All the planned programs accomplished the goals of the agricultural program, focusing on the critical areas. We discussed with the stakeholders the issues and the Extension agents developed several activities and strategies to transfer the technology to the farmers.

Some information was collected from PRAES agents and farmers. We improved the participation on public issues, such as the discussion of the price of milk at the farm level, the defense of our land suitable for agriculture, the management of the coffee Broca and the Sigatoka disease in plantain. Pest management issues have been addressed in coordination with the Experiment Station. Field days and on-site field demonstrations were conducted, and conferences and seminars were offered.

Effectiveness of the Four-H planned program has been improved by increasing the performance in different program components. We began to work in an integral form respecting the competency and potential of each participant and improved our work with volunteers. For example, we celebrated the first Puerto Rico Volunteer Forum, in which volunteers learned important life skills and how to apply them. They understood how life skills prepare people to be successful in life and how to deliver them efficiently in 4-H activities. We reinforced their 4-H knowledge and recognized their valuable support to the 4-H program. The 4-H staff offered conferences and workshops and training in life skills, leadership, and community services to PRAES county agents to enhance their performance in the field. We prepared diversified campaigns and outdoor activities to deliver preventive education and training activities. An example of this was the 4-H Community ATV Safety Program. The implementation of this program gave us the opportunity to create partnerships between the Puerto Rico Department of Transportation and Public Works, the Puerto Rico Department of Education, and private resources to develop and implement workshops and educational activities. We prepared educational materials in Spanish on this subject, as there was no material available in our language for youth on safety issues related to the operation and handling of ATVs. The material is available for those 4-H program leaders who are interested.

During the 2007 National 4-H Week, 4-Hers participated in mass communication to promote 4-H as a positive organization for youth. Mayor media in PR talked about 4-H and its purpose to encourage youth to obtain knowledge, develop life skills, and develop citizenships skills.

In the Community Resources Development planned programs, as well as in the area of Family and Consumer Sciences, effectiveness has also resulted from stakeholder input by the participants of the programs and Extension staff to improve different program areas, particularly the planned program Community Economic Development.

To summarize, the planned programs have been able to continue improving their effectiveness through the enrichment of the stakeholders' input and the multi-disciplinary and multi-institutional collaborations.

Total Actual Amount of professional FTEs/SYs for this State

Year:2007	Extension		Research	
	1862	1890	1862	1890
Plan	198.2	0.0	0.0	0.0
Actual	195.2	0.0	0.0	0.0

II. Merit Review Process

1. The Merit Review Process that was Employed for this year

- Internal University Panel
- External Non-University Panel

2. Brief Explanation

The Merit Review process was conducted through the four committees that were established, representing each of the four major program areas: Agriculture, Marketing and Natural Resources; Family and Consumer Sciences; Four-H and Youth Development; and Community Resource Development. Each committee is composed of Internal University and External Non-University Panels. Each committee met at least twice during the year. In the first meeting, Extension staff presented the Preliminary Plan of Work for the upcoming year and the committee members were asked to present their views and recommendations related to this POW. The program area leaders together with other Extension staff, then defined educational strategies to address the recommendations, which were incorporated in the final POW, as needed. During the second committee meeting, the program area leaders presented an oral and written report that identified how the committee recommendations were addressed and the Annual Report of Accomplishments.

III. Stakeholder Input

1. Actions taken to seek stakeholder input that encouraged their participation

- Targeted invitation to traditional stakeholder individuals

Brief Explanation

At the local level, the Local Advisory Committees' major task is to collect input from our local stakeholders. The committees are composed of at least two beneficiaries from each of the base program areas (Agriculture, Marketing and Natural Resources; Family and Consumer Sciences; Four-H and Youth Development; and Community Resource Development) and a minimum of two representatives from local agencies that work with similar audiences as Extension. To encourage their participation, potential members are introduced (through letters) to the importance of the process and of their contribution to improve Extension educational programs.

2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees

Brief Explanation

The members of these committees have been selected by the Extension Agents from among their target audience, based on their experience and participation in the Extension programs, and have been invited by letters to join the committee.

2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder individuals
- Other (Focus group)

Brief Explanation

The process to collect the stakeholder input took place through meetings held by the committees. These took place twice during the year to discuss critical local issues, as well as to identify emerging issues that could be addressed by Extension. Each local committee identified priority issues in each of the four programs areas. This year, once again, we had the opportunity to receive input from young stakeholders, members of the 4-H clubs. As stated in our previous report, in Puerto Rico we recognize the importance of also collecting input from our young participants, as this audience is affected by many complex physical, emotional and social issues. A small sample of 4-H members was invited to participate and share their views with respect to how the 4-H program responds to the actual needs of today's youth. The young leaders were divided into four groups where they answered five questions concerning their views of Puerto Rico's 4-H program. They prepared oral reports that were presented to the State Four-H Leader. Different actions have been taken to address these issues, as well as to improve the program to meet their needs. A second focus group was conducted at the state level where the specialist in the area of Family Relations identified educational needs from low-income families.

3. A statement of how the input was considered

- To Identify Emerging Issues
- Redirect Extension Programs
- In the Action Plans
- To Set Priorities

Brief Explanation

Input collected from stakeholders at the Local Advisory Committees is reported to the state level. This data is evaluated in order to identify emerging issues that should be included in the state plan of work. At the local level, counties then set priorities for their local plan of work according to the stakeholders' input. The other input, collected at the state level through focus groups with 4-H members and low-income families from the Family and Consumer Sciences program, were evaluated by specialists and state program are leaders in order to identify areas that needed to be strengthened.

Brief Explanation of what you learned from your Stakeholders

From what we learned from our stakeholders, issues that have been reemphasized in the Agriculture, Marketing and Natural Resources program area include environmental issues and the protection of agricultural lands. New initiatives to extend these topics at the community level have been designed and implemented within the Community Resources Development program area, which were named Communities at the Rescue of their Lands and the Land and Sea Alliance. In the Four-H program area, camping activities have been redesigned to combine subject matter with sports and arts, since the youth identified their interests in these areas. The top four problems identified by youth stakeholders were: drug use, alcohol use, peer pressure, and self-esteem. To improve the attention given to these areas, the Four-H program pilot tested the National 4-H Council curriculum "Health Rocks" (in Spanish), which addresses these issues and at the same time promotes the development of life skills. In the Family and Consumer Sciences program area, stakeholders identified the domestic violence and parenting responsibilities as major issues for attention. Therefore, the educational programs are keeping their priorities to attend these issues through the educational curriculums Family Relations and Strength and Responsible Parenting. In addition, curriculums developed during the CYFAR projects have become part of the regular program to attend these issues. A new phase of the CYFAR project has been implemented in two new municipalities where families at risk are a major priority.

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
6201817	0	0	0

2. Totaled Actual dollars from Planned Programs Inputs				
	Extension		Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	6201814	0	0	0
Actual Matching	3100904	0	0	0
Actual All Other	0	0	0	0
Total Actual Expended	9302718	0	0	0

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous years				
Carryover	0	0	0	0

V. Planned Program Table of Content

S. NO.	PROGRAM NAME
1	Human Health and Well-Being
2	Consumer Education and Individual and Family Resources Management
3	Food Safety Program
4	Strengthening Youth Life Skills, Leadership and Their Community
5	Crop Production
6	Engineering and Biosystems
7	Families and Children
8	Empowering and Self-management Communities
9	Plant Protection
10	Soil, Water, and Air
11	Healthy: No matter what my size or income
12	Management of Rangeland and Forestry Resources
13	Animal Protection
14	Community Resources Development
15	Economics, Marketing and Policy
16	Animal Production

Program #1

V(A). Planned Program (Summary)

1. Name of the Planned Program

Human Health and Well-Being

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
723	Hazards to Human Health and Safety	10%			
724	Healthy Lifestyle	80%			
804	Human Environmental Issues Concerning Apparel, Textiles, ;	10%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	9.2	0.0	0.0	0.0
Actual	5.1	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
162035	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
81017	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conference/ training related to healthy lifestyle.
- Conference/ training related to diabetes.
- Conference/ training related to injury prevention .
- Conference/ training related to indoor air quality.
- Offer advice when clientele look up in the areas of health and safety .
- Work in collaboration with the communications media.
- Prepare educational materials .
- Continue working in partnership with other agencies to develop educational programs.

2. Brief description of the target audience

Families and children from low-income areas such as "Special Communities" (those identified by the governor's office as being particularly vulnerable to social and economic problems) to educate them to adopt healthy lifestyles and school age children to develop life skills in order to learn how to handle peer pressure and to adopt healthy lifestyles.

Adolescents - using peer education strategy to promote the sexual education among this age group. Also, to prepared those with skills that may help them identify interior air contaminants, their sources, their effects in human health and their mitigation.

Individuals with an interest in preventing or treatment of chronic diseases to help them use knowledge and skills to improve their personal health behaviors.

Extension and other Professionals - (train-to-trainer and in-service training)

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	4000	5000	0	0
2007	9769	6410	3972	724

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of persons completed non-formal health education and health promotion programs

Year	Target	Actual
2007	1200	3231

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of persons that reduced their risk levels upon the completion of one or more recommended practices on healthy lifestyles
2	Number of persons that reduced their risk levels for a chronic disease upon the increase of physical activity in to their lifestyle.
3	Number of persons learned about risk reduction and safety
4	Number of adults learned about indoor air contamination
5	Number of persons detected and controlled indoor air contaminants in their homes
6	Number of persons acquired skills and modified attitudes and practices related to injury prevention

Outcome #1**1. Outcome Measures**

Number of persons that reduced their risk levels upon the completion of one or more recommended practices on healthy lifestyles

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	900	2044

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The general health status is the product of influences from the general environment, genetics and numerous specific risk factors associated to unhealthy behaviors, such as: cigarette smoking, physical inactivity, and unattended high blood pressure and diabetes. Adopting healthy behaviors such as eating nutritious foods, being physically active and avoiding use of tobacco can prevent or control the devastating effects of chronic diseases.

What has been done

PRAES personnel implanted health promotion projects directed to children and youth using different curricula guides such as: for children "Learning to be Healthy" (HIV/AIDS prevention), and "Toward a Drug Free Year 2000". For adolescents, they used the curricula of the PAS project (Postponing Sexual Activity), "Human Sexuality", and "HIV/AIDS Prevention".

An increase in actual outcomes is probably due to the special projects conducted in some school using the curricula guide "Enhancing Your Personal Appearance".

For adults, the personnel oriented in the areas of healthy lifestyles and human sexuality. PRAES personnel implanted health promotion projects directed to children and youth, using different curricula guides such as: for children "Learning to be Healthy" (HIV/AIDS prevention), and "Toward a Drug Free Year 2000". For adolescents, they used the curricula of the PAS project (Postponing Sexual Activity), "Human Sexuality" and "HIV/AIDS Prevention". For adults, the personnel offered orientation in the areas of healthy lifestyles and human sexuality.

*Increase in actual outcomes is probably due to the special projects conducted in some school using the curricula guide "Enhancing Your Personal Appearance".

Results

Of 1,671 children and youth who completed non-formal health promotion programs, 1,528 adopted one or more recommended practices after completing one or more of the programs. The practices adopted were as follow: 193 children acquired skills in identify and reject sexual abuse, 298 youth reported having acquired skills using assertive response to peer pressure, and 1088 developed a personal hygiene program. In the area of drug prevention, 41 reported they acquired skills to deal with negative peer pressure.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

Outcome #2**1. Outcome Measures**

Number of persons that reduced their risk levels for a chronic disease upon the increase of physical activity in to their lifestyle.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	900	989

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Despite the clear health benefits of regular physical activity, in 2006 about 41.2% of the Puerto Ricans reported that in the past month they had not participated in any physical activity (PRBRFSS, 2007). According to the Surgeon General's report, Americans can substantially improve their health and quality of life by including moderate amounts of physical activity in their daily lives. An emerging consensus among experts in exercise science, and health professionals that physical activity need not be of vigorous intensity for it to improve health.

What has been done

In the area of promoting healthy lifestyles, adults and youth were trained about the importance of engaging in regular physical activity and reducing sedentary activities to promote health, psychological well-being, and a healthy body weight. To lower the risk of chronic disease, they should get at least 30 minutes of moderate-intensity physical activity, above usual activity at work or home on most days of the week.

Results

Through adult physical activity education programs, 414 adults began to do 30 to 60 minutes of physical exercise on most days of the week and 485 incorporated physical activities in their lifestyle. Two hundred and eighty-three (283) youth reported participating in organized physical activity.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

Outcome #3**1. Outcome Measures**

Number of persons learned about risk reduction and safety

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1200	702

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done**

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
723	Hazards to Human Health and Safety

Outcome #4

1. Outcome Measures

Number of adults learned about indoor air contamination

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	700	448

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #5

1. Outcome Measures

Number of persons detected and controlled indoor air contaminants in their homes

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	400	379

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Most people spend approximately 90% of their time indoors. This can be highly harmful to their health, if we consider the scientific evidence which indicates that toxic levels in air in interiors can be higher than the outdoor air in even the largest and most industrialized cities. The lung is the most common site of injury by airborne pollutants. Pneumonia and influenza are the six leading cause of death in Puerto Rico.

What has been done

In the "Protect the Air You Breathe an Indoor Air Quality (IAQ) Project", the 4-H youth were trained about the 4-H IAQ Health Project and participated in the 4-H IAQ Competitions at local and regional level. The adults, participated in the "Healthy Indoor Air for America's Homes" program, emphasizing on second-hand smoke and asthma prevention.

Results

In the area of indoor air quality (IAQ), 191 youth completed the short course Youth Protect the Air You Breathe. Of these, 133 participated in the IAQ 4-H competitions, 122 limited and used more wisely the products with volatile organic compounds (VOCs); 163 promoted not smoking, and 172 detected and removed biological hazards in their homes.

Two hundred and seventy-two (272) adults learned about indoor air contamination through short courses, seminars, and home assessment. Of these, 117 improved/corrected moisture levels in the home, 207 detected and controlled indoor air contaminants in their homes, 150 took steps to check/maintain/correct combustion appliances, 202 detected and removed biological hazards, and 72 took steps to maintain the air conditioning equipment in optimum conditions.

4. Associated Knowledge Areas

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #6

1. Outcome Measures

Number of persons acquired skills and modified attitudes and practices related to injury prevention

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	460

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Accidents, the eighth cause of death (Health Department, 2007), are a significant threat to adults and older people, causing death and an extraordinary number of disabilities. There is some concern among policymakers about both the cost and health implications of overuse and inappropriate use of emergency rooms. A recent study made by the "Oficina de la Procuradora del Paciente" found that 64.3% of the persons that visited hospital emergency rooms brought major and minor medical problems, but not urgent conditions. People need to know how to identify the signs and symptoms that require a visit to the emergency room.

What has been done

PRAES audiences were oriented on risk reduction and safety to encourage them to incorporate safety habits in their lives. Children and youth were oriented through the curricula guide "Prevention of Accidents and Rejection Drugs and Alcohol" (PAnDA). Adults were oriented through the project "Prevention of Injury Using Safety" (PLUS), developed to prepare individuals and families to take the correct steps in case of an emergency.

Results

Through the accidents prevention education programs (PAnDA), 60 children and youth reported having acquired knowledge in the prevention of traffic accidents and the relationship between traffic accidents and drugs. Of these, 54 began to use helmet and take pedestrian and cyclist measures.

Of 460 adults oriented in risk reduction and safety, 432 acquired skills and modified attitudes and practices related to injury prevention at the home, 444 adopted practices to prevent poisoning, 372 prepared a first aid kit, and 400 demonstrated the steps to make a call to the emergency services (911).

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Public Policy changes

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)

Evaluation Results

Key Items of Evaluation

Program #2

V(A). Planned Program (Summary)

1. Name of the Planned Program

Consumer Education and Individual and Family Resources Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
607	Consumer Economics	20%			
801	Individual and Family Resource Management	80%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	9.2	0.0	0.0	0.0
Actual	8.7	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
276413	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
138206	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Curriculum and educational materials development
- Training the trainers
- Workshops
- Establishment of collaborations
- Consulting
- Media programs
- Exhibitions (Billboards in malls and public places with informative brochures and other educational material)

2. Brief description of the target audience

New couples, individuals, low-income families, Extension professionals, personnel from other State agencies.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	2400	5000	0	0
2007	4133	2264	1242	299

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Total number of consumers that completed the Consumer Education Course.

Year	Target	Actual
2007	300	1085

Output #2

Output Measure

- Total number of consumers that completed individual and family resource management course.

Year	Target	Actual
2007	300	381

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Total number of consumers that prepared an individual or family budget (Family Resource Management)
2	Total number of consumers that adopted the practice of preparing their individual or family budget (Family Resource Management)
3	Total number of consumers that acquired skills on how to use their credit card, their checking account, or their savings account. (Family Resource Management)
4	Total number of consumers that made plans to reduce credit card use. (Family Resource Management)
5	Total number of consumers that adopted debt reduction.(Family Resource Management)
6	Total number of consumers that acquired knowledge about track spending patterns. (Family Resource Management)
7	Total number of consumers that adopted practices on how to save.(Family Resource Management)
8	Number of consumers that opened a savings account. (Family Resource Management)
9	Number of consumers that acquired knowledge to request their credit record. (Family Resource Management)
10	Number of consumers that improved their financial well-being.
11	Total number of consumers that acquired knowledge about consumption decision-making process (Consumer Education course)
12	Total number of consumers that acquired knowledge about their rights and responsibilities as consumers (Consumer Education course)
13	Total number of consumers that acquired skills on how to differentiate between needs and desires. (Consumer Education course)
14	Total number of consumers that acquired skills to avoid the influence of publicity and marketing on decision-making. (Consumer Education course)
15	Total number of consumers that adopted savings practices through goods and services selection process. (Consumer Education course)
16	Total number of consumers that acquired knowledge to establish goals and objectives (Family Resource Management)

Outcome #1**1. Outcome Measures**

Total number of consumers that prepared an individual or family budget (Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	275	315

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #2**1. Outcome Measures**

Total number of consumers that adopted the practice of preparing their individual or family budget (Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	480

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #3**1. Outcome Measures**

Total number of consumers that acquired skills on how to use their credit card, their checking account, or their savings account. (Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	275	197

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #4**1. Outcome Measures**

Total number of consumers that made plans to reduce credit card use. (Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	181

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #5

1. Outcome Measures

Total number of consumers that adopted debt reduction.(Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	206

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #6

1. Outcome Measures

Total number of consumers that acquired knowledge about track spending patterns. (Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	275	289

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #7

1. Outcome Measures

Total number of consumers that adopted practices on how to save.(Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	410

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #8

1. Outcome Measures

Number of consumers that opened a savings account. (Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150	87

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #9

1. Outcome Measures

Number of consumers that acquired knowledge to request their credit record. (Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	275	115

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #10

1. Outcome Measures

Number of consumers that improved their financial well-being.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	178

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #11

1. Outcome Measures

Total number of consumers that acquired knowledge about consumption decision-making process (Consumer Education course)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	275	519

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done**Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
607	Consumer Economics

Outcome #12**1. Outcome Measures**

Total number of consumers that acquired knowledge about their rights and responsibilities as consumers (Consumer Education course)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	275	366

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
607	Consumer Economics

Outcome #13**1. Outcome Measures**

Total number of consumers that acquired skills on how to differentiate between needs and desires. (Consumer Education course)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	275	332

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics

Outcome #14

1. Outcome Measures

Total number of consumers that acquired skills to avoid the influence of publicity and marketing on decision-making. (Consumer Education course)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	275	584

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics

Outcome #15

1. Outcome Measures

Total number of consumers that adopted savings practices through goods and services selection process. (Consumer Education course)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	482

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics

Outcome #16

1. Outcome Measures

Total number of consumers that acquired knowledge to establish goals and objectives (Family Resource Management)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	275	877

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

-

Evaluation Results

Key Items of Evaluation

Program #3

V(A). Planned Program (Summary)

1. Name of the Planned Program

Food Safety Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
712	Protect Food from Contamination by Pathogenic Microorgani	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	8.2	0.0	0.0	0.0
Actual	8.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
266881	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
133441	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

For Consumers1. Fight BAC! Courses-Teaching field personnel selected a minimum of four lessons out of eight that were available based on the needs of their clientele.2. Protect your baby:-Curriculum consisting of four lesson, brochure and flip charts were used to address pregnant women and mothers of infants. We've recommended the use of this curriculum with teens that are already moms and moms to be.3. Course and competition, Nutrition and innocuous recipes-Curriculum includes three lessons: 1) Developing nutritional and innocuous recipes; 2) Steps for preparing innocuous recipes; 3) Puerto Rico Food Pyramid and competition on the preparation of original, nutritious, and innocuous recipes.4. Exhibition, information centers, radio programs, and other activities.

For Persons in charge of Food EstablishmentsThere has been continuous training and coordination using home economists who offered the Food Safety Certification Course (FSCC). FSCC consists of 12 main lessons and one optional lesson about Food Defense.

2. Brief description of the target audience

ull; Fight BAC Courses: Consumers of all ages, with emphasis on at-risk population such as elderly, children, pregnant women, and others. We also emphasize young mothers. • Food Safety Certification Course: Owners, managers or any person in charge of supervising retail food establishments. • Training and specialized advising to professionals: Specialists, home economists, agricultural agents; administrators of agencies that serve food to at-risk population; Environmental Health inspectors, and other professionals that work in Puerto Rico's Partnership for Food Safety Education.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	12100	9000	0	0
2007	12605	3237	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of consumers completing one educational curriculum.

Year	Target	Actual
2007	1200	941

Output #2**Output Measure**

- Number of participants that completed FSCC.

Year	Target	Actual
2007	2500	3274

Output #3**Output Measure**

- Number of technical help in HACCP, GMP and/or SSOP provides through visits, documents evaluation for revision or writing, i

Year	Target	Actual
2007	4	6

Output #4**Output Measure**

- Number HACCP, GMP y/o SSOP documents evaluated, corrected or written.

Year	Target	Actual
2007	3	2

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of consumers that adopted one or more food handling practices.
2	Number of participants that approved the certification exam.
3	Number of participants that wrote a plan to control the temperatures in Potentially Hazardous Foods (PHF).
4	Number of participants that adopted 15 or more of 20 selected food handling practices recommended by the Food Code.
5	Number of facilities that implement prepared or corrected HACCP plan as a result of the technical help offered.
6	Number of facilities improving or modifying the existing GMP and SSOP as a result of the technical help offered.

Outcome #1**1. Outcome Measures**

Number of consumers that adopted one or more food handling practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1000	858

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Consumers who attended the food safety courses achieved the knowledge on proper food handling practices. When consumers handle food safely, they protect their family and lower the risk of foodborne disease.

What has been done

PRAES home economists offered Fight BAC! courses with a minimum of four lessons. They had to offer at least one lesson of each of the Fight BAC! campaign steps: Separate, Cook, Chill, and Clean. Volunteer leaders would also participate of the coordination and offering of these courses. The Fight BAC! course was offered to 941 consumers.

Results

91% of the 941 consumers that participated of the Fight BAC! courses adopted one or more safe food handling practices. Among the practices adopted were: more than 90% wash their hands frequently and clean and disinfect the surfaces in contact with food and 40% of the participants use a food thermometer to measure internal food temperatures.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi

Outcome #2**1. Outcome Measures**

Number of participants that approved the certification exam.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	2500	3006

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

In order to comply with the Food Code 2005, persons in charge of food establishments shall demonstrate to the regulatory authority knowledge on different food safety topics. Participants of this course consisted of a varied typed of food retail establishments including: cafeterias, restaurants, mobile vendors, school cafeterias, Head Start Program, hospitals, grocery stores, and others.

What has been done

The health inspector refers the participants in order to give the establishment the endorsement or license to operate and verifies the knowledge of the person in charge during visits to the establishment. Eighteen (18) home economists and two specialists offered FSCC to the persons in charge of food establishments. The Puerto Rico FSCC includes the 17 knowledge areas described in the Food Code.

Results

92%, of the 3,274 FSCC participants that completed the course, approved the certification exam with a score of 70% or more. There were persons in charge of different types of retail food establishments among the participants.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi

Outcome #3

1. Outcome Measures

Number of participants that wrote a plan to control the temperatures in Potentially Hazardous Foods (PHF).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1200	1400

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Persons in charge of food establishments must comply with the Food Code of 2005 and must also show the health inspector their food temperature registers.

What has been done

During the past year, the Puerto Rico Department of Health adopted a new inspection form for which they must conduct their inspections based on HACCP principles. The health inspector will write down on this new form the food temperatures that have been measured during their visit. The Inspector will also require evidence of the person in charge of the food establishment that they are measuring: cooking, holding, and cooling temperatures. As part of the FSCC, there are examples of temperature records in the materials handed out to the participants, which they can modify according to the needs of the establishment they work for.

Results

47%, of the 3,274 FSCC participants, wrote a plan to control the temperatures of Potentially Hazardous Foods and keep records.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi

Outcome #4

1. Outcome Measures

Number of participants that adopted 15 or more of 20 selected food handling practices recommended by the Food Code.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1750	1740

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi

Outcome #5

1. Outcome Measures

Number of facilities that implement prepared or corrected HACCP plan as a result of the technical help offered.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	3	113

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

113 Plants implemented the HACCP plan.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi

Outcome #6**1. Outcome Measures**

Number of facilities improving or modifying the existing GMP and SSOP as a result of the technical help offered.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	3	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Other (Personnel retirement, new reporting system)

Brief Explanation

In the past year many changes have occurred, which have affected some of the outcomes, especially in the food industry. Among these changes, is the sales tax imposed by the Puerto Rican government, which has directly impacted the pockets of the food industry and of the consumers. The rising oil prices have also affected the prices of essential and non essential goods. Consumers are trying to save as much as they can, therefore, there is less demand and the food industry has been negatively affected, especially small food plants. Some have had to close down and others have had to fire some employees. These small plants were attended by the food technology specialist. Bigger plants usually have their own food technologist. Another factor was the retirement of the two specialists of the Food Safety Program, one of these was in charge of the technical help for GMP and SSOP in the facilities.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- Before-After (before and after program)

Evaluation Results

The PRAES Food Safety Certification Course (FSCC) was coordinated and offered by the home economists around the island and the participants were persons in charge of food establishments (PIC). The Food Code was adopted in the year 2000. One the responsibilities of the person in charge, is that he/she must demonstrate food safety knowledge. The general objectives of the course were: 1) that the PIC will increase their knowledge in food safety; and 2) They will adopt safe food handling practices in order to comply with food code regulation. At the end of the course, all the participants had to complete a written test that consisted of 80 multiple choice questions. The participants had to score 70% or more In order to approve the course. Three thousand two hundred and seventy-four (3,274) participants completed at least 12 lessons, of which 3,006 (92%) approved the test. For the second objective, the participants were handed out a questionnaire on food handling practices, which was completed before and after the course. As a Pilot Test, the PRAES specialist prepared a questionnaire which consisted of 14 questions. For the purpose of this evaluation, we randomly selected a sample of 300 participants.

Safe food handling practices practice	% if participants following the practice	% of participants following the
	BEFORE the course	AFTER the course
Had a written plan on who to control temperature/time in Potentially Hazardous Foods (PHF).	26%	83%
Employees washed their hands with soap and water every time they'd change food items or tasks.	88%	99%
Had separate cutting boards.	59%	89%
Measure temperatures every 2 hours at the exhibition line.	25%	73%
Employees used disposable gloves or utensil to handle ready-to-eat foods.	60%	96%
PIC hired an exterminator as part of their IPM Program.	74%	91%
Washed and sanitized utensils.	69%	89%
Thawed PHF in the refrigerator on the last shelf.	70%	92%
Thawed food in clean sink under running water.	35%	56%
Thawed small pieces as part of the cooking process, such as hamburgers.	47%	67%
Keep food hot on a Steam Table.	36%	61%
Used the 4-hour rule.	27%	
62% Used the 6-hour rule.	23%	
66% PIC excluded ill employees.	67%	
90%		

Overall, there was an increase in the adoption of safe food handling practices by the participants. This questionnaire was a Pilot Study in order to test the validity of the instrument. We are now revising the questionnaire in order to improve it and make the information more valid.

Key Items of Evaluation

The PRAES Food Safety Certification Course (FSCC) consists of 12 lessons (24 hour contact). It is required by the Puerto Rico Department of Health to give a license to a food establishment. The course is based on the Food Code 2005 knowledge requirements and the responsibilities of the PIC.

During this FY 2006-2007, 3,274 participants completed the FSCC and 92% approved the Food Safety Course exam. FSCC professors administered a questionnaire about the adoption of food handling practices before and after the course. There were changes in behavior in all of the 14 safe food handling practices measured.

Program #4

V(A). Planned Program (Summary)

1. Name of the Planned Program

Strengthening Youth Life Skills, Leadership and Their Community

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	43.6	0.0	0.0	0.0
Actual	41.8	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
1328053	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
664026	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conferences or workshops training in life skills, leadership, and community services.
- Camping and outdoor activities.
- Curriculum developed in life skills, leadership and community service.
- Participate in mass communication to promote 4-H as a positive organization for youth.
- Projects where youth and adults volunteers can develop skills that will enable them to make a positive contribution to society.
- Competitive activities/events.
- Non-competitive activities/events.

2. Brief description of the target audience

Youth and 4-H members, Extension professionals, professional government personnel, volunteers, and community residents.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1500	0	50000	30000
2007	11776	0	96730	22773

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of training and workshops in life skills and subject matter.

Year	Target	Actual
2007	500	2640

Output #2**Output Measure**

- Number of children/ youth who participated in competitive activities.

Year	Target	Actual
2007	1000	2092

Output #3**Output Measure**

- Number of children/ youth who participated in non competitive activities.

Year	Target	Actual
2007	5000	10481

Output #4**Output Measure**

- Number of youth who participated in community service projects.

Year	Target	Actual
2007	500	698

Output #5**Output Measure**

- Number of children/ youth who participated in life skills and subject matter educational programs designed to teach basic life s

Year	Target	Actual
2007	5000	4148

Output #6**Output Measure**

- Number of youth and others volunteers working with youth in youth development programming.

Year	Target	Actual
2007	800	1078

Output #7**Output Measure**

- Number of children/youth participating in youth leadership programs.

Year	Target	Actual
2007	1000	701

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of children/youth who reported working in one or more educational project areas.
2	Number of children/youth who reported improved decision making skills.
3	Number of children/youth who reported improved communication relationships with parents or peers.
4	Number of children/youth who assumed leadership roles.
5	Number of children/youth who reported improved conflict management skills.
6	Number of children/youth who reported improved planning and organization skills.
7	Number of youth volunteers conducting community service programs.
8	Number of children/youth who developed and established a community projects to address a particular issue.

Outcome #1**1. Outcome Measures**

Number of children/youth who reported working in one or more educational project areas.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	500	875

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2**1. Outcome Measures**

Number of children/youth who reported improved decision making skills.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	500	2009

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3

1. Outcome Measures

Number of children/youth who reported improved communication relationships with parents or peers.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1300	1256

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #4

1. Outcome Measures

Number of children/youth who assumed leadership roles.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	318

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #5

1. Outcome Measures

Number of children/youth who reported improved conflict management skills.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1000	1699

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #6

1. Outcome Measures

Number of children/youth who reported improved planning and organization skills.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	2000	1024

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #7

1. Outcome Measures

Number of youth volunteers conducting community service programs.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	179

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #8

1. Outcome Measures

Number of children/youth who developed and established a community projects to address a particular issue.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	20	239

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Other ()

Brief Explanation

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V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)

Evaluation Results

This planned program focused on the development of youth life skills, therefore the evaluation plan for this and the coming years will focus on the development of instruments to measure different life skills in the 4-Hers.

The first pilot study was conducted during Fiscal Year 2007. The instrument used to measure changes in life skills was translated and adapted from the instrument "Skills for Everyday Living" by Claudia Mincemoyer and Daniel Perkins from Penn State University, plus one item from "Washington State Life Skill Evaluation System", for the life skill of communication. The instrument was translated into Spanish with permission of the author C. Mincemoyer. Life skills measured included: decision making, problem solving, communication, goal setting, and planning/organizing. The instrument was administered as pre and post tests. Answers were from a five point Likert scale (Always = 4, never = 0). The instrument was pilot tested with 71, 4-H members participating in the educational course Health Rocks ("La Salud es Súper"). This curriculum was developed through the sponsorship of the National 4-H Council and is based in the Targeting Life Skills Model of Patricia Hendricks and the Experiential Learning Model. The intervention was implemented in four public schools where 89, 4-Hers benefited from some of the educational sections, but only 71 completed the total course and answered both pre and posts tests.

Validity was established by a panel of experts from the 4-H program staff including the program leader and specialists. Reliability was measured by Cronbach Alpha. Values obtained are presented in the following table for the five subscales and the total scale.

Lif Skills Subscales	Number of Items	Cronbach's Alpha
Decision making	5	0.580
Communication	6	0.605
Problem solving	6	0.604
Goal setting	4	0.575
Planning/Organizing	5	0.688
Total Scale	26	0.859

Life skills	Pre Test Mean	Post Test Mean	Significancy
Decision making	2.88	3.09	0.002
Communication	2.93	3.02	0.169
Problem solving	2.94	3.03	0.132
Goal setting	3.10	3.26	0.049

Other written comments of the participants included:

"I have learned how to work in groups. Also, I have changed my attitude in the way to respect others and have more confidence in myself. I know now how to deal with a problem."

"Now I think more carefully before making a decision. I also learned more about respect to others."

"I have improved my attitude. I learned to help others, but also not to do everything my friends say like using drugs."

In sum, participation in educational activities in the 4-H program helped 4-Hers increase life skills needed for positive youth development.

Results from this outcome evaluation showed 4Hers increased in life skills after their participation in the course Health Rocks. Positive changes in three of the life skills measured (decision making, goal setting and planning/organizing) showed to be statistically significant.

Key Items of Evaluation

Seventy-one (71) 4-H members completed the educational course Health Rocks and answered a pre and post test to measure changes in life skills.

Results from this outcome evaluation showed 4-Hers increased in life skills after their participation in the course. Positive changes in three of the life skills measured (decision making, goal setting, and planning/organizing) showed to be statistically significant.

Life skills	Pre Test Mean	Post Test Mean	Significancy
Decision making	2.88	3.09	0.002
Communication	2.93	3.02	0.169
Problem solving	2.94	3.03	0.132
Goal setting	3.10	3.26	0.049

"I have learned how to work in groups. Also, I have changed my attitude in the way to respect others and have more confidence in myself. I know now how to deal with a problem."

"Now, I think more carefully before making a decision. I also learned more about respect to others."

"I have improved my attitude. I learned to help others, but also not to do everything my friends say like using drugs."

In sum, participation in educational activities in the 4-H program helped 4-Hers increase life skills needed for positive youth development.

Program #5

V(A). Planned Program (Summary)

1. Name of the Planned Program

Crop Production

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
204	Plant Product Quality and Utility (Preharvest)	30%			
205	Plant Management Systems	70%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	20.0	0.0	0.0	0.0
Actual	18.2	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
578243	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
289121	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conferences or workshops training on product production systems.
- Farmers' Orientation visits and guidance
- Participated in mass communication to promote good practices in crop production.
- Conducted farmers' meetings.
- Collaborated with local government agencies (Departments of Agriculture and Environmental and Natural Resources) and USDA (NRCS and others) .
- Prepared cultivation practices plan.
- Prepared and distributed publication about crop production practices
- Prepared products quality improvement plan.
- Trained farmers in GAP
- Trainings in varieties, cultivation practices and plant management.
- Prepared DVD and CDs about planting systems and cultivation practices.

2. Brief description of the target audience

The target audience were farmers, Extension professionals (agricultural agents, specialists), USDA professionals (ARS, FSA and NRCS), local government professionals of the Departments of Agriculture and Environmental and Natural Resources, product distributors and professionals from the private sector.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	6000	3000	0	0
2007	14017	8501	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of persons trained on plant management systems in crop commodities.

Year	Target	Actual
2007	1000	7374

Output #2

Output Measure

- Number of persons trained on products quality in crop commodities.

Year	Target	Actual
2007	570	3949

Output #3

Output Measure

- Number of persons trained on value added in crop commodities.

Year	Target	Actual
2007	300	1589

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of farmers that adopted one or more recommended practices of the plant management systems in crop commodities.
2	Number of farmers that increased production in crop commodities.
3	Number of farmers that increased the quality in crop commodities.
4	Number of farmers that adopted new value-added practices in crop commodities.
5	Number of farmers that increased their income after having adopted one or more practices of plant management systems.

Outcome #1**1. Outcome Measures**

Number of farmers that adopted one or more recommended practices of the plant management systems in crop commodities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	625	2175

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #2**1. Outcome Measures**

Number of farmers that increased production in crop commodities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	350	751

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #3**1. Outcome Measures**

Number of farmers that increased the quality in crop commodities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	400	1147

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
204	Plant Product Quality and Utility (Preharvest)

Outcome #4**1. Outcome Measures**

Number of farmers that adopted new value-added practices in crop commodities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150	199

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Many farmers lost part of their production due to the poor quality of their products and excess products or had no packing management of their products. This caused losses in the quantity of the products sold in the fresh products market.

What has been done

The PRAES agricultural extension agents and specialists visited the farms and offered trainings to farmers to increase the quality of their crops and in packing materials and management of the products for added value of the products. Some farmers were also trained in new uses for the crops, such as juices and others and in good agricultural practices (GAP).

Results

With this action the farmers increased the value added to the products they harvested that they are unable to sell in the fresh market.

4. Associated Knowledge Areas

KA Code	Knowledge Area
204	Plant Product Quality and Utility (Preharvest)

Outcome #5

1. Outcome Measures

Number of farmers that increased their income after having adopted one or more practices of plant management systems.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	250	721

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Many farmers were unable to sell part of their production due to the poor quality of the fruit production and low production of fruit and other crops. Some farmers also lacked post harvest management practices of their products. This caused a loss in sales in the fresh products market due to their poor quality and post harvest diseases.

What has been done

The PRAES agricultural agents and specialists visited the farms and offered training to farmers on the best agricultural practices to help them increase the quality and amount of their production. The farmers were also trained on post harvesting management practices of their products and good agricultural practices (GAP).

Results

With this action the farmers adopted new practices to manage their farms and increase their farm income.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations

Brief Explanation

V(l). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

-

Evaluation Results

Key Items of Evaluation

Program #6

V(A). Planned Program (Summary)

1. Name of the Planned Program

Engineering and Biosystems

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
401	Structures, Facilities, and General Purpose Farm Supplies	15%			
402	Engineering Systems and Equipment	10%			
403	Waste Disposal, Recycling, and Reuse	65%			
405	Drainage and Irrigation Systems and Facilities	10%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	5.9	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
187452	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
93726	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conducted workshops and meetings.

- Established collaborations with government agencies (Environmental Quality Board; State Departments of Health, Agriculture, Environmental and Natural Resources, and Education; Puerto Rico Aqueducts and Sewage Authority; USEPA; USDA; NRCS; and others).

- Established collaborations with our partners in the University of Puerto Rico and other educational institutions.

- Developed educational material consisting of model plans and specifications for structures.

- Distributed plans and specifications for structures.

- Designed waste management systems (new or improvement to existing facilities).

- Collaborated in the construction of demonstration facilities.

2. Brief description of the target audience

Extension professionals, government personnel (professional), professionals from the private sector, and farmers.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	4000	1000	0	0
2007	879	542	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of workshops and meetings offered.

Year	Target	Actual
2007	5	218

Output #2**Output Measure**

- Number of collaborations established to improve engineering and biological systems infrastructure.

Year	Target	Actual
2007	25	82

Output #3**Output Measure**

- Number of clients that participated in the workshop on structures.

Year	Target	Actual
2007	50	428

Output #4**Output Measure**

- Number of clients that participated in workshop on waste management systems.

Year	Target	Actual
2007	200	318

Output #5**Output Measure**

- Number of waste management systems designed.

Year	Target	Actual
2007	50	70

Output #6**Output Measure**

- Number of clients that participated in workshop on drainage or irrigation systems.

Year	Target	Actual
2007	10	165

Output #7**Output Measure**

- Number of plans and specifications for model structures completed and distributed.

Year	Target	Actual
2007	100	92

Output #8**Output Measure**

- Number of demonstration facilities established.

Year	Target	Actual
2007	2	2

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of clients that increased their knowledge about improvements to increase the efficiency of their structures (new and existing) and compliance with regulations.
2	Number of clients that increased their knowledge about appropriate systems for waste management in their projects.
3	Number of clients that increased their knowledge about drainage or irrigation facilities.
4	Number of clients that adopted one or more of the recommended practices to increase the efficiency of their structures and comply with all permits.
5	Number of clients that adopted one or more practices to improve their drainage or irrigation facilities.
6	Number of farmers that improved their structures (new or existing) and/or comply with permits.
7	Number of waste management systems improved (new or existing).
8	Number of drainage or irrigation facilities improved.
9	Number of farmers that increased their production as a result of improving their structures.
10	Number of farmers that increased their production as a result of improving their waste management systems.
11	Number of farmers that increased their production as a result of improving their drainage or irrigation facilities.

Outcome #1

1. Outcome Measures

Number of clients that increased their knowledge about improvements to increase the efficiency of their structures (new and existing) and compliance with regulations.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	198

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

Outcome #2

1. Outcome Measures

Number of clients that increased their knowledge about appropriate systems for waste management in their projects.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	244

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
403	Waste Disposal, Recycling, and Reuse

Outcome #3

1. Outcome Measures

Number of clients that increased their knowledge about drainage or irrigation facilities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	10	104

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
405	Drainage and Irrigation Systems and Facilities

Outcome #4

1. Outcome Measures

Number of clients that adopted one or more of the recommended practices to increase the efficiency of their structures and comply with all permits.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	79

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

Outcome #5

1. Outcome Measures

Number of clients that adopted one or more practices to improve their drainage or irrigation facilities.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	79

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
405	Drainage and Irrigation Systems and Facilities

Outcome #6

1. Outcome Measures

Number of farmers that improved their structures (new or existing) and/or comply with permits.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	75

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Government officials are concerned because of effects of zoning regulations and urban expansion on agriculture.

What has been done

Existing buildings have been improved, facilities relocated, and new projects have gone through the full permitting process.

Results

Complying with the permits required, allows farmers to legalize their projects and qualify for government incentives and lower insurance rates. It also puts them in a better position to face problems associated with urban expansion and complaints from neighbors.

4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

Outcome #7

1. Outcome Measures

Number of waste management systems improved (new or existing).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	80

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

General impression that farms with animals in confinements pollute and hinder water quality problems.

What has been done

Solid-liquid separators have been constructed on small swine farms, composting facilities have been added to the waste management systems in horse farms, and land application of wastewater and other practices have been put into use.

Results

Improvement of the waste management systems and carrying out the required practices results in improved water quality and less complaints by environmental advocate groups.

4. Associated Knowledge Areas

KA Code	Knowledge Area
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Outcome #8**1. Outcome Measures**

Number of drainage or irrigation facilities improved.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	21

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
405	Drainage and Irrigation Systems and Facilities

Outcome #9**1. Outcome Measures**

Number of farmers that increased their production as a result of improving their structures.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	30

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

Outcome #10

1. Outcome Measures

Number of farmers that increased their production as a result of improving their waste management systems.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	70	39

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
403	Waste Disposal, Recycling, and Reuse

Outcome #11

1. Outcome Measures

Number of farmers that increased their production as a result of improving their drainage or irrigation facilities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	2	14

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
405	Drainage and Irrigation Systems and Facilities

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations

Brief Explanation

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V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

-

Evaluation Results

Key Items of Evaluation

Program #7

V(A). Planned Program (Summary)

1. Name of the Planned Program

Families and Children

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	9.2	0.0	0.0	0.0
Actual	9.2	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
292299	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
146149	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Participated in several radio broadcasted programs and TV programs (Channel 13)
- Conducted workshops, trainings, and meetings
- Developed educational materials and curriculums related to family relations, child and human development, elder aspects, family resilience, and related areas.
- Continued the collaboration with partners with the University of Puerto Rico, government and private agencies, and other educational institutions.
- Developed and implemented curriculums (Successful Parenting, Character Traits, Family Strengths, Grandparents raising Grandchildren)
- Wrote and submitted the proposal Puerto Rico Empower Parents to have Successful Children, which was approved by CSREES USDA.

2. Brief description of the target audience

Extension agents, home economists, PRAES specialists, government staff and professionals from other agencies, parents, children, elder people, volunteers, and general public.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	10500	15000	0	0
2007	9776	10853	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of workshops, trainings, and meetings offered.

Year	Target	Actual
2007	60	113

Output #2**Output Measure**

- Number of collaborations/established.

Year	Target	Actual
2007	260	268

Output #3**Output Measure**

- Number of persons trained in parenting and related areas.

Year	Target	Actual
2007	900	1689

Output #4**Output Measure**

- Number of volunteers/community leaders trained in family relations and related areas.

Year	Target	Actual
2007	200	182

Output #5**Output Measure**

- Number of persons trained in aging aspects.

Year	Target	Actual
2007	200	561

Output #6**Output Measure**

- Number of persons trained in values, character traits, and/or family strengths.

Year	Target	Actual
2007	600	688

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of persons that reported improved parenting skills.
2	Number of persons that increased knowledge in parenting and related areas.
3	Number of volunteer/community leaders that demonstrated their adopted skills by teaching and/or training others.
4	Number of persons that gained knowledge in aging aspects.
5	Number of persons reported improved skills and increased knowledge in values and character traits.
6	Number of children and youth benefitted indirectly.
7	Number of persons that increased knowledge from educational material and resources through campaigns and other educational methodologies

Outcome #1**1. Outcome Measures**

Number of persons that reported improved parenting skills.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	600	1292

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #2**1. Outcome Measures**

Number of persons that increased knowledge in parenting and related areas.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	600	688

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #3

1. Outcome Measures

Number of volunteer/community leaders that demonstrated their adopted skills by teaching and/or training others.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	121

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #4

1. Outcome Measures

Number of persons that gained knowledge in aging aspects.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	1136

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #5

1. Outcome Measures

Number of persons reported improved skills and increased knowledge in values and character traits.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	600	328

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #6

1. Outcome Measures

Number of children and youth benefitted indirectly.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	849

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #7

1. Outcome Measures

Number of persons that increased knowledge from educational material and resources through campaigns and other educational methodologies

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	2000	2198

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Public Policy changes
- Competing Public priorities
- Other (Availability fed., ext. funds)

Brief Explanation

In a tropical island setting, we are subject to a variety of natural events, which include hurricanes, long periods with heavy rains and/or winds, and droughts. There is a general feeling that the economy is weak and the government's inability to solve our budget problems project an unstable economy. As a result, there have been changes in the money assigned to government agencies and changes in public policy and priorities. The support needed from the municipal mayors varies when their interests are different from the interests presented by the program. Also changes in priorities of the agency's administrators affects program outcomes.

V(l). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

-

Evaluation Results

Key Items of Evaluation

Program #8

V(A). Planned Program (Summary)

1. Name of the Planned Program

Empowering and Self-management Communities

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
803	Sociological and Technological Change Affecting Individuals, Community Institutions, Health, and Social Services	50%			
805		50%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	23.0	0.0	0.0	0.0
Actual	26.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
838770	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
419385	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conference/training related to community coalitions.
- Community educational campaigns.
- Seminars in community disaster or emergency situations management.
- Prepare educational materials like curriculum and module in community empowerment and leadership.
- Establish community coalitions.

2. Brief description of the target audience

Individuals and families in social and economic disadvantaged communities and key leaders.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1000	10000	0	0
2007	3271	1408	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of workshops in leadership development.

Year	Target	Actual
2007	25	178

Output #2**Output Measure**

- Number of leaders participating in workshops.

Year	Target	Actual
2007	250	1310

Output #3**Output Measure**

- Number of workshops on community organization and empowerment development.

Year	Target	Actual
2007	25	38

Output #4**Output Measure**

- Number of leaders participating in workshops on community organization and empowerment development.

Year	Target	Actual
2007	25	283

Output #5**Output Measure**

- Number of coalitions established in the communities.

Year	Target	Actual
2007	25	46

Output #6**Output Measure**

- Number of coalition members.

Year	Target	Actual
2007	150	112

Output #7**Output Measure**

- Number of seminars on emergency and disaster situations offered.

Year	Target	Actual
2007	25	15

Output #8**Output Measure**

- Number of leaders participating in seminars.

Year	Target	Actual
2007	250	299

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of communities organized.
2	Number of communities that took action over their necessities to improve their quality of life through empowerment and self-management.
3	Number of leaders with community and civic engagement.
4	Number of communities that took action over specific necessities.
5	Number of community projects established to benefit the community.
6	Number of leaders participating actively in the design and implementation of community projects.
7	Number of communities that developed an emergency and safety plan.
8	Number of governmental or other organizations that collaborated in the communities' organization and development.

Outcome #1**1. Outcome Measures**

Number of communities organized.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	47

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #2**1. Outcome Measures**

Number of communities that took action over their necessities to improve their quality of life through empowerment and self-management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	20	81

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #3

1. Outcome Measures

Number of leaders with community and civic engagement.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150	546

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
805	Community Institutions, Health, and Social Services

Outcome #4

1. Outcome Measures

Number of communities that took action over specific necessities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	82

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #5

1. Outcome Measures

Number of community projects established to benefit the community.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	60

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #6

1. Outcome Measures

Number of leaders participating actively in the design and implementation of community projects.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	250	729

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
805	Community Institutions, Health, and Social Services

Outcome #7

1. Outcome Measures

Number of communities that developed an emergency and safety plan.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	9

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #8

1. Outcome Measures

Number of governmental or other organizations that collaborated in the communities' organization and development.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	167

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Programatic Challenges

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

-

Evaluation Results

Key Items of Evaluation

Program #9

V(A). Planned Program (Summary)

1. Name of the Planned Program

Plant Protection

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
211	Insects, Mites, and Other Arthropods Affecting Plants	25%			
212	Pathogens and Nematodes Affecting Plants	20%			
213	Weeds Affecting Plants	20%			
214	Vertebrates, Mollusks, and Other Pests Affecting Plants	5%			
216	Integrated Pest Management Systems	30%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	10.0	0.0	0.0	0.0
Actual	11.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
365373	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
182687	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

•PRAES agents trained farmers on pests of economical importance that affect the profitability of different crop commodities. These commodities were banana and plantain, herbs (coriander, cilantro), citrus, avocado and ornamentals. In banana and plantain, Extension agents educated and trained growers in evaluation of the incidence of Black Sigatoka in the field and the management practices available, focusing on IPM approach.

•In forest health, Extension agents, agricultural educators, and personnel of the Department of Environmental and Natural Resources trained growers and other personnel related to forest management in key pests in nurseries and urban forests, using as reference the manual and electronic presentation by the Entomology specialist, which were posted in <http://www.academic.uprm.edu/ofarrill>.

•In herb production, Extension agents emphasized identification and management of key pests of cilantro (“Eryngium foetidum”) and coriander (“Coriandrum sativum”) in trainings and education offered to growers.

•Seminars and radio programs growers were conducted by PRAES agents as part of an educational program to orient growers about management practices available for the control of pests and disease in crops of importance.

•Demonstrations were conducted in hydroponic nurseries of producers to demonstrate the benefits of IPM practices and promote their adoption.

•The citrus commodity emphasized the evaluation of IPM practices in nurseries to control the citrus leafminer and orientation to growers about key pests in citrus through the use of an educational guide developed by the IPM Specialist. The evaluation of the citrus leaf miner IPM practices in nurseries was delayed in 2007.

2. Brief description of the target audience

Pesticide applicators, homeowners, landscapers, farmers, personnel of the Department of Environmental and Natural Resources, agronomists of the Department of Agriculture.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	9000	2000	0	0
2007	3768	7727	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of trainings offered on pesticide use and IPM program.

Year	Target	Actual
2007	200	1003

Output #2**Output Measure**

- Number of persons that completed a training program in integrated pest management in the crop commodities.

Year	Target	Actual
2007	400	3482

Output #3**Output Measure**

- Number of farmers that completed a training program on pesticide application.

Year	Target	Actual
2007	2000	2043

Output #4**Output Measure**

- Number of persons trained on commercial pesticide application.

Year	Target	Actual
2007	1300	2477

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of persons that acquired knowledge after completing a training program in integrated pest management.
2	Number of persons that adopted one or more techniques after completing an integrated pest management program.
3	Number of persons that reduced the use of pesticides after completing an integrated pest management program.
4	Number of persons that established IPM program after completing a training program.
5	Number of farmers that acquired knowledge after completing a training program in pesticide application.
6	Number of farmers that acquired knowledge after completing a training program in integrated pest management.

Outcome #1**1. Outcome Measures**

Number of persons that acquired knowledge after completing a training program in integrated pest management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	375	2684

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
212	Pathogens and Nematodes Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants

Outcome #2**1. Outcome Measures**

Number of persons that adopted one or more techniques after completing an integrated pest management program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150	940

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants

Outcome #3

1. Outcome Measures

Number of persons that reduced the use of pesticides after completing an integrated pest management program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	75	400

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In 2007, a project was developed to promote the adoption and implementation of effective strategies to reduce the potential for pest problems on ornamental plants to protect the urban environment from unnecessary pesticide applications.

What has been done

Agricultural educators were trained in landscape IPM through a train the trainer program. A landscape IPM manual with a set of 14 electronic presentations was created. Eight 1-day train-the-trainer sessions were held with an attendance of 158 agricultural educators (PRAES agents, school teachers, PRAES specialists, and researchers). Each attendee received a copy of the educational materials.

Results

All attendees increased their knowledge and attitudes toward non-chemical pest control tactics, biorational pesticides, and pesticide safety. Through this train-the-trainer program, we helped landscapers to adopt IPM methods and reduce the effect of pests in landscapes. This effort directly benefits over 1000 landscapers in Puerto Rico. Approximately 80% of landscapers and their employees are now making better management decisions based on IPM techniques and apply pesticides as part of this program. The outreach has helped raise awareness and promote optimal management strategies while reducing the economic and health impact of pesticide use in the environment.

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
212	Pathogens and Nematodes Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants

Outcome #4

1. Outcome Measures

Number of persons that established IPM program after completing a training program.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	229

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In 2007, a project was developed to promote the adoption and implementation of effective strategies to reduce the potential for pest problems on urban trees to protect the urban environment from pests and establish an IPM Program.

What has been done

Agricultural educators were trained in urban tree IPM through a train-the-trainer program. A Tree IPM manual, with a set of nine electronic presentations in Spanish, was created. Eight 1-day train-the-trainer sessions were held with an attendance of 149 agricultural educators (PRAES agents, school teachers, PRAES specialists, and researchers). Each attendee received a copy of the educational materials.

Results

All attendees increased their knowledge in identification and IPM techniques in trees. This program helped forest managers to establish an IPM program in state and urban forests, reducing the effect of key pests. This effort directly benefits over 500 forest managers in Puerto Rico. The outreach has helped raise awareness and promote optimal management strategies while reducing the effects of pesticide use in the environment. As a result of this work, forest managers will improve the quality of pest management in a sustainable way.

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants

Outcome #5

1. Outcome Measures

Number of farmers that acquired knowledge after completing a training program in pesticide application.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1900	2468

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
213	Weeds Affecting Plants
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
212	Pathogens and Nematodes Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants

Outcome #6

1. Outcome Measures

Number of farmers that acquired knowledge after completing a training program in integrated pest management.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	2684

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
213	Weeds Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
212	Pathogens and Nematodes Affecting Plants

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations

Brief Explanation

V(l). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Other (,)

Evaluation Results

Key Items of Evaluation

Program #10

V(A). Planned Program (Summary)

1. Name of the Planned Program

Soil, Water, and Air

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	10%			
102	Soil, Plant, Water, Nutrient Relationships	40%			
104	Protect Soil from Harmful Effects of Natural Elements	10%			
111	Conservation and Efficient Use of Water	15%			
112	Watershed Protection and Management	15%			
141	Air Resource Protection and Management	10%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	8.0	0.0	0.0	0.0
Actual	7.3	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
231933	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
115966	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- The guidelines of the regulatory laws for water quality were compiled and distributed among the agricultural agents.

- Short courses and trainings were offered.

- On-site farm visits for water quality, watershed protection, and fertilization and soil conservation practices.

- Recommended practices for soil conservation and fertilization were established.

- Several collaborations were made with government agencies (NRCS, PR Department of Natural Resources & Environment, USDA Forest Service, PR Department of Agriculture, and Soil Conservation District Association).

- We distributed information at agricultural fairs and festivals on water and air

2. Brief description of the target audience

Farmers (includes small family farms, large scale farm business operation), farm workers, government professionals.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	3000	2000	0	0
2007	3961	1398	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	2	0	2

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of trainings offered on soil, water, and air.

Year	Target	Actual
2007	15	20

Output #2**Output Measure**

- Number of farmers trained on agricultural practices for air and water quality.

Year	Target	Actual
2007	100	77

Output #3**Output Measure**

- Number of people trained on environmental regulations for soil, air and water quality.

Year	Target	Actual
2007	200	237

Output #4**Output Measure**

- Number of farmers trained on soil fertility.

Year	Target	Actual
2007	200	358

Output #5**Output Measure**

- Number of farmers trained on soil conservation practices.

Year	Target	Actual
2007	100	170

Output #6**Output Measure**

- Number of people trained on watershed protection.

Year	Target	Actual
2007	50	40

Output #7**Output Measure**

- Number of people trained on conservation and effective use of water resources.

Year	Target	Actual
2007	200	391

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of farmers that adopted the recommended practices for air and water quality
2	Number of farmers that comply with the soil, air, and water regulations.
3	Number of farmers that adopted the fertilization practices.
4	Number of farmers that adopted one or more soil conservation practices.
5	Number of farmers that established practices for the protection of watersheds.
6	Number of persons that adopted practices to improve water resources.

Outcome #1**1. Outcome Measures**

Number of farmers that adopted the recommended practices for air and water quality

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	19

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Extension Agents oriented the farmers on air and water quality because the regulatory agencies have identified contaminated areas from the farming operations.

What has been done

Extension Agents oriented the farmers and general public on air & water quality. They also offered trainings.

Results

Nineteen (19) farmers adopted the recommended practices for air and water quality. There were problems with the regulations established by the Environmental Quality Board and the farmers did not comply with the practices for air and water quality. The costs of the practices and the expertise required were factors that affected the outcome.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
141	Air Resource Protection and Management

Outcome #2**1. Outcome Measures**

Number of farmers that comply with the soil, air, and water regulations.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	78

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Extension Agents, in coordination with other agencies, offered information to the farmers. There are new regulations on the Quality Environmental Board, EPA and the Department of Natural Resources and Environment that the farmers have to comply with on their farms.

What has been done

Educational material was prepared. Environmental laws & regulations and control of air pollution. Some material was presented at the web page <http://academic.uprm.edu/gonzalez/>.

Results

Seventy eight (78) farmers complied with the regulations. The farmers had difficulties with the regulations established by the agencies. There are not incentives for the farmers on these agricultural practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
141	Air Resource Protection and Management
112	Watershed Protection and Management

Outcome #3**1. Outcome Measures**

Number of farmers that adopted the fertilization practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150	315

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Extension Agents & Soil Specialist offered orientation on fertilization practices.

What has been done

Trainings, farm visits and coordination with the Department of Agriculture (Analytical Lab) to determine soil pH and nutrients.

Results

Three hundred fifteen (315) farmers adopted the fertilization practices. They used the soil analysis results for fertilizer applications. The fertilizer costs increased during the last two years. The farmers are aware of the cost of this input and try to maximize it. They are using more foliar applications and composting products.

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
102	Soil, Plant, Water, Nutrient Relationships

Outcome #4**1. Outcome Measures**

Number of farmers that adopted one or more soil conservation practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	75	120

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Extension Agents oriented the farmers on soil conservation practices. The erosion of our soils are causing the sedimentation of the lakes.

What has been done

Farm visits, meeting with NRCS personnel & farmers to promote the incentives (EQIP). A Memorandum of Understanding was made between Extension Service, NRCS, state Department of Agriculture and the District Soil Conservation Association to enhance the conservation practices.

Results

One hundred twenty (120) farmers adopted the soil conservation practices. The farmers received incentives to establish these practices. Extension agents promoted the programs and oriented the farmers to conserve the land and achieve an adequate production.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
104	Protect Soil from Harmful Effects of Natural Elements
112	Watershed Protection and Management
101	Appraisal of Soil Resources

Outcome #5

1. Outcome Measures

Number of farmers that established practices for the protection of watersheds.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	15

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Extension Agents offered the information to farmers and general public. There is concern about the watershed, because of Puerto Rico's problem in supplying water to the metropolitan area. New housing projects and farm operations require more water.

What has been done

Coordination with agencies such as the PR Department of Natural Resources and Environment, the Environmental Quality Board and the Aqueduct and Sewer Authority. Extension Agents oriented the public on aspects related to watershed protection.

Results

Fifteen (15) farmers established practices for watershed protection that include amendments to the Waste Disposal Plan, the planting of trees and better fertilization management. The cost of establishing the waste disposal plan has been a limiting factor for the farmers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
104	Protect Soil from Harmful Effects of Natural Elements
112	Watershed Protection and Management
111	Conservation and Efficient Use of Water

Outcome #6**1. Outcome Measures**

Number of persons that adopted practices to improve water resources.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150	184

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Extension Agents offered orientation on conservation and efficient use of the water resources.

What has been done

Conferences, meetings and trainings were offered by the Extension agents.

Results

One hundred eighty four (184) persons adopted practices to improve water resources. There was an issue about the use of water for agriculture vs. housing that impacted farming operations. Some farmers constructed ponds and others have new irrigation systems that have improved their production and water use.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Government Regulations

Brief Explanation

The Environmental Quality Board revised the field standards for agricultural waste management. There are more regulations that require capital investment to keep the business operating. Also, the Department of Agriculture reduced the incentives to the farmers due to economic problems. The costs of some inputs increased affecting the production. The prices at the farm level are the same and the competition with products that come from other external markets at lower prices cause a reduction of income to our farmers; as a result, less farmers adopt the practices.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

-

Evaluation Results

Key Items of Evaluation

Program #11

V(A). Planned Program (Summary)

1. Name of the Planned Program

Healthy: No matter what my size or income

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	80%			
704	Nutrition and Hunger in the Population	20%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	9.2	0.0	0.0	0.0
Actual	14.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
457511	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
228755	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

•MyPyramid’s new format was adapted to non English speaking audiences, to their cultural idiosyncrasies and preferred foods. A task force set up by the Nutrition Committee of Puerto Rico and the Foods and Nutrition Commission of Puerto Rico evaluated the new guide and to adapt it to Puerto Rico. The PRAES Nutrition Specialist, was in charge of the committee that did the scientific analysis of the guide and the Director of the EFNEP Program was co-chair of the project. The evaluation process was finished in the Spring of 2006 and the home economists received training on the new guide in the Fall of 2006.

•Obesity prevention, especially in children, is uncharted territory with few reports of success. To deal with this a new methodology for preventing obesity in children using Community Based Participatory Research (CBPR) and the Health at Every Size paradigm was planned. It would be introduced in the PRAES Caguas Region. To assure that we can rigorously evaluate its effectiveness and have available the multidisciplinary expertise needed, a proposal was submitted to NIH in June 2007. The proposal was not accepted on this first try and will be resubmitted this June.

•The curriculum for “Healthy: no matter what my size or income” was developed in the summer and fall of 2007 and the home economists were trained in November 2007. In the meantime, they have used the material related to the Food Guide Pyramid that was introduced in the fall of 2006 and the “Complete your Meal with Milk” campaign.

•The home economists report that 3,727 persons completed courses in this planned program in FY 2007. A short course consists of 4 to 6 meetings in which the group identifies the areas of most interest and then the home economist designs the course, based on available materials, to the interests of the group.

•An additional 1,117 people were oriented on Farmer’s Markets. Eighty two (82) community volunteers taught courses in this area, and collaboration was established with 248 other entities.

2. Brief description of the target audience

Extension educators, parents, the person that plans/buys/prepares food for the family, low income families with small children or no children, personnel/students in schools, community leaders

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	10000	8000	0	0
2007	8438	3679	3951	861

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of persons that completed the short course.

Year	Target	Actual
2007	1000	6257

Output #2

Output Measure

- Number of volunteers that use the curriculum for a course or project.

Year	Target	Actual
2007	25	82

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of people who recognize that they are attractive, no matter what they weigh.
2	Number of people who recognize that they can prepare a meal for their family or for themselves.
3	Number of people who recognize that they can make more nutritious choices when they eat out.
4	Number of people who developed the attitude that 'It is possible to feed my family with the money that is available.'
5	Number of people who can compliment a person without referring to their size.
6	Number of people who increased the consumption of whole grains.
7	Number of people who increased the consumption of fruits.
8	Number of people who increased the consumption of vegetables.
9	Number of people who decreased the consumption of beverages that are basically sugar and water.
10	Number of people who consume milk with their meals.
11	Number of people who consume oils, nuts or avocados frequently.
12	Number of people that grow food for their own use in gardens or flower pots.
13	Number of people who use fruit that grows in their backyard.
14	Number of people who prepare meals for the people living in their household.
15	Number of people who prepare one-dish meals.
16	Number of people who select lower cost alternative foods of the same or increased nutritional value.
17	Number of people who make a shopping list.
18	Number of people who make use of food specials.
19	Number of people who are proud that they can prepare delicious low cost meals.
20	Number of people who plan their meals based on rice and beans or pasta, with one to two ounces of meat or meat substitute per person.
21	Number of people who now use herbs and condiments to enhance the flavor and appeal of foods.
22	Number of people who now eat according to the recommendations of the Food Guide Pyramid for Puerto Rico.
23	Number of people who now have enough food to feed their family the entire month.
24	Number of persons that invented a new recipe.

Outcome #1**1. Outcome Measures**

Number of people who recognize that they are attractive, no matter what they weigh.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	300	461

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #2**1. Outcome Measures**

Number of people who recognize that they can prepare a meal for their family or for themselves.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	300	1126

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Food is expensive, many people on the island have limited incomes, but also have limited time. Food preparation is not taught in the schools and many young mothers have not learned these skills at home.

What has been done

3,727 people completed a short course in nutrition, healthy weight, food preparation and/or food security in FY 2007. A short course consists of 4 to 6 meetings in which the group identifies the areas of most interest. The home economist designs the course, based on available materials, to the interests of the group.

Results

1,126 people recognized that they can prepare a meal for their family, 963 prepared meals for the people that live with them, 631 prepared one-dish meals, 365 prepared meals based on rice and beans with 1-2 ounces of meat, 645 increased the use of herbs or condiments in their food preparation, 256 invented a recipe, 1,064 selected local food products, and 652 prepared tasty attractive meals.

4. Associated Knowledge Areas

KA Code	Knowledge Area
704	Nutrition and Hunger in the Population

Outcome #3**1. Outcome Measures**

Number of people who recognize that they can make more nutritious choices when they eat out.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	400	2200

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #4**1. Outcome Measures**

Number of people who developed the attitude that 'It is possible to feed my family with the money that is available.'

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	305

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
704	Nutrition and Hunger in the Population

Outcome #5**1. Outcome Measures**

Number of people who can compliment a person without referring to their size.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	300	369

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #6**1. Outcome Measures**

Number of people who increased the consumption of whole grains.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #7**1. Outcome Measures**

Number of people who increased the consumption of fruits.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	250	1958

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

There are many products in the supermarket that are sold in the juice section that are basically water, sugar, flavoring, and colorant. Unfortunately, most consumers think of these beverages as "juice". Since fruit have membranes and may have an edible covering, a fruit will have more nutritional components than a juice. Therefore, it is necessary to emphasize the importance of actually eating fruit rather than consuming beverages that may or may not have fruit juice in them. Unfortunately, if one has to buy fruit, it is usually more expensive than buying "juice".

What has been done

3,727 people completed a short course in nutrition, healthy weight, food preparation and/or food security in FY 2007. A short course consists of 4 to 6 meetings in which the group identifies the areas of most interest and then the home economist designs the course, based on available materials, to the interests of the group.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #8**1. Outcome Measures**

Number of people who increased the consumption of vegetables.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	250	1418

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

All the cells of the body and all the processes needed to keep the body alive and functioning come from two sources: food and water. Food contains proteins, carbohydrates, fat, vitamins, minerals, dietary fiber, antioxidants, and other components that are essential or helpful in maintaining a good health. Water supplies not only help provide 80% of the body that is water, but they also supply significant amounts of essential minerals, such as fluoride, calcium, magnesium, etc.

What has been done

3,727 people completed a short course in nutrition, healthy weight, food preparation and/or food security in FY 2007. A short course consists of 4 to 6 meetings in which the group identifies the areas of most interest to them. The home economist designs the course, based on available materials, to the interests of the group.

Results

Of the people that attended the courses, 2,200 people improved food selection away from home, 1,471 increased their consumption of fruits (does not include juices), 1,418 increased their consumption of vegetables, 1,310 now drink milk with their meals, 669 decreased their meat consumption, and 1,349 now use oils instead of solid fats.

In the Municipality of Cidra, the home economist offered a course, which emphasized the preparation of a variety of healthy, economical, and accessible foods. The 18 participants increased their consumption of vegetables using a variety of menus and recipes that they learned in the course. Two of the participants were motivated to become leaders and share their knowledge and the skills acquired in the course with other groups in their community.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #9**1. Outcome Measures**

Number of people who decreased the consumption of beverages that are basically sugar and water.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	350	1213

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #10**1. Outcome Measures**

Number of people who consume milk with their meals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	300	1767

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The recommendations of the 2005 Dietary Guidelines advisory committee, state that 24 ounces of milk should be consumed daily by all adults. Milk consumption in Puerto Rico used to be quite high, particularly when milk consumed with coffee was counted. However, the use of milk flavored coffee by children has been discouraged in more recent years, milk at all meals has been replaced by soft drinks and other beverages that are basically sugar and water.

What has been done

3,727 people completed a short course in nutrition, healthy weight, food preparation and/or food security in FY 2007. A short course consists of 4 to 6 meetings in which the group identifies the areas of most interest. The home economist designs the course, based on available materials, to the interests of the group. The PR Extension Service has a campaign to increase milk consumption based on the theme: Complete your meal with milk.

Results

"A child recognizes the importance of milk" by: Zenaida Ruiz-Rivera, Home Economist, Anasco Puerto Rico
 In the Carmen Casusus Elementary School in Anasco, we offered a course based on the "Complete your meal with milk" campaign. There were 33 fifth grade children in the course, of which two did not consume any milk because they preferred soft drinks. One of them commented that soft drinks were his life and that he was never going to give them up and was never going to drink milk. In the lesson about diseases are associated with the lack of drinking milk the boy cried and asked if he was going to get sick if he drank a lot of soft drinks. The importance and benefits of drinking milk were explained to him and at the end of the lessons he commented that he had tried milk with breakfast and it was not really that bad.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #11

1. Outcome Measures

Number of people who consume oils, nuts or avocados frequently.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	1349

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #12

1. Outcome Measures

Number of people that grow food for their own use in gardens or flower pots.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	123

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population

Outcome #13

1. Outcome Measures

Number of people who use fruit that grows in their backyard.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	461

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population

Outcome #14

1. Outcome Measures

Number of people who prepare meals for the people living in their household.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	300	963

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #15

1. Outcome Measures

Number of people who prepare one-dish meals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	225	631

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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Outcome #16**1. Outcome Measures**

Number of people who select lower cost alternative foods of the same or increased nutritional value.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	225	934

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #17**1. Outcome Measures**

Number of people who make a shopping list.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	225	420

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population

Outcome #18

1. Outcome Measures

Number of people who make use of food specials.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	225	661

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population

Outcome #19

1. Outcome Measures

Number of people who are proud that they can prepare delicious low cost meals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	292

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
704	Nutrition and Hunger in the Population
703	Nutrition Education and Behavior

Outcome #20

1. Outcome Measures

Number of people who plan their meals based on rice and beans or pasta, with one to two ounces of meat or meat substitute per person.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	365

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #21

1. Outcome Measures

Number of people who now use herbs and condiments to enhance the flavor and appeal of foods.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	645

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #22

1. Outcome Measures

Number of people who now eat according to the recommendations of the Food Guide Pyramid for Puerto Rico.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #23

1. Outcome Measures

Number of people who now have enough food to feed their family the entire month.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	544

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Food insecurity is something that should not happen in modern Puerto Rico due to the availability of food checks and other government programs; however, the money supplied is limited and many people have to struggle to provide food for their families.

What has been done

3,727 people completed a short course in nutrition, healthy weight, food preparation and/or food security in FY 2007. A short course consists of 4 to 6 meetings in which the group identifies the areas of most interest to them. The home economist designs the course, based on available materials, to the interests of the group.

Results

Three hundred and five (305) persons developed the attitude that it is possible to feed their family with the money available, 292 feel proud that they can prepare delicious meals with limited money, 123 persons have planted fruit or vegetables for their own use, 461 now use the fruit that they have in their patio, 420 make a shopping list, 661 use the weekly food specials, and 544 report that they now have enough food in their homes to last the entire month.

4. Associated Knowledge Areas

KA Code	Knowledge Area
704	Nutrition and Hunger in the Population

Outcome #24**1. Outcome Measures**

Number of persons that invented a new recipe.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	256

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

This indicator is designed to inspire creativeness among current cooks who frequently feel that the only way to prepare foods is by following a recipe or by using the techniques that their mother taught them. It is aimed at increasing interest in preparing food at home.

What has been done

3,727 people completed a short course in nutrition, healthy weight, food preparation and/or food security in FY 2007. A short course consists of 4 to 6 meetings in which the group identifies the areas of most interest to them. The home economist designs the course, based on available materials, to the interests of the group.

Results

"The Importance of Breakfast", by: Jean I. Hernandez-Rivera

Many children and youth substitute breakfast by eating snacks that are high in salt, fat, and sugar, or wait to eat at lunchtime which is damaging to their health and the quality of their schoolwork. The second competition of the "Best Puerto Rican Breakfast" was held in April 2007. Twenty two (22) fifth and sixth grade 4-H members from two elementary schools in Ceiba PR participated. The children were trained about the Food Guide Pyramid for Puerto Rico, food safety and recipe preparation. A jury composed of volunteer leaders, and representatives from various agencies verified their knowledge of the recipe. The 4-H members were able to demonstrate their knowledge of nutrition and their leadership. They prepared recipes of high nutritional value using foods produced in Puerto Rico. In addition 4 students improved their food habits by reestablishing eating breakfast before school starts each morning.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Public Policy changes

Brief Explanation

The lessons necessary to give the new planned focus to the area of nutrition education and behavior were not developed until the Summer and Fall of 2007, because it was necessary to develop the "Food Guide Pyramid for Puerto Rico 2005", which was presented to the public in April 2006 and to the home economists in the Fall of 2006. The training for the home economists on the lessons was offered in November of 2007. Six of the new lessons emphasize the Health at Every Size paradigm, five emphasize preparation of foods, one is directed to helping change habits and one is directed to making adequate choices in selecting foods outside the home. These lessons are based on dialogue technique as developed by Jane Vella. The exhibition and radios spots that were planned will be developed in Spring 2007. It is expected that the home economists will teach 4 to 6 lessons as a short course.

Dialogue teaching methodology depends on orienting the lessons to the expressed needs of the participants, which differ from group to group. Therefore, the best way to plan a curriculum to meet the needs of the participants is to have a number of interactive lessons in which the home economists can select what best fits the expressed needs of her audience at that particular point in time.

In two of the outcome measures, the results were stated as 0 due to the fact that whole grain products are hard to identify in Puerto Rico and many products that say "integral" (translation of whole grains), are actually based on enriched flour. This situation was reported to the Secretary of the Department of Consumer Affairs, but he said that it was impossible to legislate anything in Puerto Rico regarding the phrase "whole grains" and its translation into Spanish, because the federal government does not have a definition of what a "whole grain" is. The indicator of the Food Guide Pyramid was also reported as 0 since it was not clearly stated in terms of what is expected per food group. These indicators will be rewritten for FY 2009.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Other (,)

Evaluation Results

Key Items of Evaluation

Program #12

V(A). Planned Program (Summary)

1. Name of the Planned Program

Management of Rangeland and Forestry Resources

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
121	Management of Range Resources	40%			
122	Management and Control of Forest and Range Fires	5%			
123	Management and Sustainability of Forest Resources	20%			
124	Urban Forestry	30%			
133	Pollution Prevention and Mitigation	5%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	6.0	0.0	0.0	0.0
Actual	5.2	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
165212	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
82606	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conducted workshops and meetings.

- We joined efforts with government agencies (DNRA, USDA-NRCS and others) through educational activities to implement the AES educational program for farmers.

- AES specialists in urban forest, plant and pest protection joined efforts to promote urban forestry through workshops, trainings and radio programs.

- Eighteen conference/training activities related to range management were offered.

- 214 conference/training activities related to urban forestry were offered.

- Several radio programs were broadcasted by extension agents.

- Developed a forest fire curriculum for school students.

- A web site for forest prevention issues was developed: <http://academic.uprm.edu/gonzalez/>

- Conducted an educational campaign on the prevention of forest fires.

2. Brief description of the target audience

County agents, home economists, government personnel, community residents, youth 13-18 years old, farmers, and homeowners.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	2000	3000	0	0
2007	2441	615	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of farmers trained in range management.

Year	Target	Actual
2007	300	428

Output #2**Output Measure**

- Number of people that participated in workshops, conferences or meetings on urban forestry.

Year	Target	Actual
2007	300	984

Output #3**Output Measure**

- Number of persons trained on forest and rangeland fire prevention.

Year	Target	Actual
2007	75	72

Output #4**Output Measure**

- Number of persons trained on pollution prevention and mitigation of natural resources.

Year	Target	Actual
2007	200	814

Output #5**Output Measure**

- Number of agency collaborations established.

Year	Target	Actual
2007	5	66

Output #6**Output Measure**

- Number of people trained on natural resources and forest conservation.

Year	Target	Actual
2007	300	813

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of farmers that improved their pastures.
2	Number of persons that adopted one or more practices on natural resources and forest conservation.
3	Number of reforestation projects established.
4	Numbers of persons that adopted one or more practices on fire prevention in forests and rangelands.
5	Number of farmers that adopted the recommended range management practices.
6	Number of acres in improved pastures.
7	Number of persons that adopted practices for pollution prevention and mitigation of natural resources

Outcome #1**1. Outcome Measures**

Number of farmers that improved their pastures.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	327

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
121	Management of Range Resources

Outcome #2**1. Outcome Measures**

Number of persons that adopted one or more practices on natural resources and forest conservation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150	278

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry

Outcome #3**1. Outcome Measures**

Number of reforestation projects established.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	15	25

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Twenty five reforestation projects were established around the island. Citizen groups concerned with global changes, deforestation and destruction of our forests and green areas developed reforestation projects to improve the environment.

Urban and rural communities are developing educational campaigns and reforestation projects to restore green areas around the island. In the past, forest and green areas around the cities were destroyed and converted to agricultural lands or for the development of roads, housing or commercial developments. Things are changing and now there is great concern about reforestation issues and conservation of our green areas around the cities.

What has been done

PRAES developed educational campaigns to encourage the reestablishment of green areas and forest in urban and rural communities. Many of these areas were abandoned a long time ago or used for other purposes. PRAES joined efforts with the Department of Natural Resources and Environment (DRNA), communities and citizen groups, and schools to implement a tree planting campaign in urban communities across the island. Besides, a reforestation campaign was developed for soil and water erosion control.

Community groups are increasing more and more their participation in forest educational activities, urban forest conferences and in the Land Use Plan (PUT) for their communities.

Results

Twenty-five (25) projects were established in nine municipalities (Juncos, Villalba, Humacao, Las Piedras, Aguada, Las Marias, Barranquitas, Canovanas and Naranjito) as a result of efforts made by citizens in their communities together with the participation of PRAES and federal and state government agencies.

4. Associated Knowledge Areas

KA Code	Knowledge Area
124	Urban Forestry

Outcome #4**1. Outcome Measures**

Numbers of persons that adopted one or more practices on fire prevention in forests and rangelands.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	30	96

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
122	Management and Control of Forest and Range Fires

Outcome #5**1. Outcome Measures**

Number of farmers that adopted the recommended range management practices.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150	398

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
121	Management of Range Resources

Outcome #6

1. Outcome Measures

Number of acres in improved pastures.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1500	174

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
121	Management of Range Resources
123	Management and Sustainability of Forest Resources

Outcome #7

1. Outcome Measures

Number of persons that adopted practices for pollution prevention and mitigation of natural resources

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	619

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
133	Pollution Prevention and Mitigation

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Other (Availability economic incentives)

Brief Explanation

Puerto Rico is affected by an economic recession that increases all farm costs. Farmers are changing their priorities to lower costs and minimize the economic impact.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)

Evaluation Results

Key Items of Evaluation

Program #13

V(A). Planned Program (Summary)

1. Name of the Planned Program

Animal Protection

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
311	Animal Diseases	40%			
312	External Parasites and Pests of Animals	25%			
313	Internal Parasites in Animals	25%			
315	Animal Welfare/Well-Being and Protection	10%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	7.0	0.0	0.0	0.0
Actual	5.1	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
162035	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
81017	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Trainings.
- Establish collaborations with local and federal agencies.

2. Brief description of the target audience

Agricultural producers, Extension professionals, community leaders, and other professionals.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	2400	2000	0	0
2007	1447	1470	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of persons trained in control and prevention of diseases.

Year	Target	Actual
2007	150	249

Output #2**Output Measure**

- Number of persons trained in bio-security program.

Year	Target	Actual
2007	200	380

Output #3**Output Measure**

- Number of persons trained in control and prevention of internal and external parasites.

Year	Target	Actual
2007	200	325

Output #4**Output Measure**

- Number of persons trained in animal welfare and protection.

Year	Target	Actual
2007	0	321

Output #5**Output Measure**

- Number of collaborations established.

Year	Target	Actual
2007	20	39

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of persons that adopted disease control and prevention practices.
2	Number of persons that reduced the number of diseased animals on their farm.
3	Number of persons that adopted a bio-security program.
4	Number of persons that adopted practices in animal welfare and protection.
5	Number of persons that adopted practices for the control of parasites on their farm.

Outcome #1**1. Outcome Measures**

Number of persons that adopted disease control and prevention practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	250	889

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
312	External Parasites and Pests of Animals
313	Internal Parasites in Animals
311	Animal Diseases

Outcome #2**1. Outcome Measures**

Number of persons that reduced the number of diseased animals on their farm.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	200	713

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Farmers and the general public do not use biosecurity practices. It is a common practice of people and farmers to go around the farms, thus carrying with them and spreading diseases. When controls are not practiced or established, the opportunity of spreading diseases among farms increases. The presence of the West Nile Virus in horses and preoccupation relating to an avian influenza outbreak have caused great concern not only to farmers, but to the entire population.

What has been done

The Extension specialist and agricultural agents have been involved in biosecurity practices with farmers and the general public. During visits to farms, they oriented farmers and employees in biosecurity practices to prevent the introduction of diseases in their premises. The personnel have developed articles and use information from sources like the USDA to educate the clientele and websites.

Results

An alliance was established between PRAES, USDA-Veterinary Services, the Puerto Rico Department of Agriculture, and the Department of Health to orient the entire population about steps to follow in case of finding or observing any signs of diseased animals in their backyard or on the farm.

There is great concern of transmissible disease from animals to man. As a result, farmers have been working on practices to control and prevent the spread of disease on their premises.

4. Associated Knowledge Areas

KA Code	Knowledge Area
311	Animal Diseases
315	Animal Welfare/Well-Being and Protection

Outcome #3

1. Outcome Measures

Number of persons that adopted a bio-security program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	25	58

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
311	Animal Diseases

Outcome #4

1. Outcome Measures

Number of persons that adopted practices in animal welfare and protection.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	663

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection

Outcome #5

1. Outcome Measures

Number of persons that adopted practices for the control of parasites on their farm.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	747

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
312	External Parasites and Pests of Animals
313	Internal Parasites in Animals

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities

Brief Explanation

Changes in climate such as droughts and heavy rains. Natural occurrences such as hurricanes, case heavy rains and high winds (June to November) affecting animals and animal production. Long periods of drought during the dry season followed by heavy rains during the raining season and the hurricane season, have devastating effects on animals and animal production and, consequently, on the economy.

Government changes and a lack of long term planning result in an unstable environment in government agencies, causing changes in priorities and performance in general. This results in changes and disruption in the projects and affects program outcomes.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

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Evaluation Results

Key Items of Evaluation

Program #14

V(A). Planned Program (Summary)

1. Name of the Planned Program

Community Resources Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	11.5	0.0	0.0	0.0
Actual	6.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
203338	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
101669	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conference/training related to micro enterprises and community-based businesses.
- Individual counseling.
- Collaboration with the Special Communities Office of the Government of Puerto Rico.

2. Brief description of the target audience

Extension professionals, community leaders, community members, and other professionals.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	500	10000	0	0
2007	404	98	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of persons trained in community-based business.

Year	Target	Actual
2007	75	223

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of persons applying the recommended practices in the process of developing a community-based business.
2	Number of community-based businesses established.

Outcome #1**1. Outcome Measures**

Number of persons applying the recommended practices in the process of developing a community-based business.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	15	39

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #2**1. Outcome Measures**

Number of community-based businesses established.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Other (Program restructuring)

Brief Explanation

During 2007, the Community Resource Development Program (CRD)--UPR at Mayagüez, began an overall restructuring of its Knowledge Area 608, Community Resources Planning and Development. As part of this restructuring process, a new specialist was appointed to develop a new curriculum, new workshop and conference series, as well as a new dissemination strategy. As a result of these major changes in focus and approach, the direct and indirect contacts were adversely affected since there was no indirect contact material developed in this period and most direct material was under revision.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

-

Evaluation Results

Key Items of Evaluation

Program #15

V(A). Planned Program (Summary)

1. Name of the Planned Program

Economics, Marketing and Policy

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
601	Economics of Agricultural Production and Farm Management	40%			
602	Business Management, Finance, and Taxation	30%			
604	Marketing and Distribution Practices	20%			
610	Domestic Policy Analysis	10%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	6.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
206515	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
103258	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Farm visits
- Trainings
- Seminars

2. Brief description of the target audience

Farmers, agricultural entrepreneurs, Extension professionals.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	300	600	0	0
2007	3363	1686	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of trainings, courses and seminars offered.

Year	Target	Actual
2007	10	15

Output #2

Output Measure

- Number of farmers and agricultural entrepreneurs trained.

Year	Target	Actual
2007	150	300

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Number of farmers and agricultural entrepreneurs that adopted one or more economic practices.
2	Number of farmers and agricultural entrepreneurs that utilize economic tools to take effective economic decisions to improve their business.

Outcome #1**1. Outcome Measures**

Number of farmers and agricultural entrepreneurs that adopted one or more economic practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	30	45

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
610	Domestic Policy Analysis
602	Business Management, Finance, and Taxation
604	Marketing and Distribution Practices
601	Economics of Agricultural Production and Farm Management

Outcome #2**1. Outcome Measures**

Number of farmers and agricultural entrepreneurs that utilize economic tools to take effective economic decisions to improve their business.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	10	15

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
610	Domestic Policy Analysis
604	Marketing and Distribution Practices
602	Business Management, Finance, and Taxation

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Programatic Challenges

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

-

Evaluation Results

Key Items of Evaluation

Program #16

V(A). Planned Program (Summary)

1. Name of the Planned Program

Animal Production

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	15%			
302	Nutrient Utilization in Animals	20%			
303	Genetic Improvement of Animals	10%			
305	Animal Physiological Processes	10%			
306	Environmental Stress in Animals	10%			
307	Animal Management Systems	20%			
308	Improved Animal Products (Before Harvest)	15%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	14.0	0.0	0.0	0.0
Actual	15.1	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
479751	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
239875	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Farmers, farm workers, government and animal industry related professionals. Field days and short courses on reproductive management and genetic improvement of animals were offered.

- Extension publications on nutrient utilization to improve animal performance and to reduce waste disposal were distributed among Extension Agents and farmers.

- Several farms waste management plans were revised according to actual regulations and established.

- On site farms visits was used as the main method to evaluate the farm production techniques as a means to improve animal products quality.

2. Brief description of the target audience

Farmers, Extension professionals, government personnel, and private professionals.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	3000	4000	0	0
2007	4520	6719	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of farmers trained on animal production.

Year	Target	Actual
2007	300	400

Output #2**Output Measure**

- Number of farmers trained on control of environmental stress on animals.

Year	Target	Actual
2007	100	250

Output #3**Output Measure**

- Number of farmers trained on animal products.

Year	Target	Actual
2007	50	200

Output #4**Output Measure**

- Number of collaborations established.

Year	Target	Actual
2007	40	65

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	Outcome Name
1	Number of persons that improved efficiency of animal production.
2	Number of persons that adopted one or more practices to control heat stress.
3	Number of persons that improved the quality of their product.
4	Numbers of persons that improved the animal reproduction practices.
5	Number of persons that improved the nutrient utilization practices in animals.
6	Number of persons that increased animal production after adopting the recommended practices.

Outcome #1**1. Outcome Measures**

Number of persons that improved efficiency of animal production.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150	125

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
306	Environmental Stress in Animals
305	Animal Physiological Processes
308	Improved Animal Products (Before Harvest)
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
303	Genetic Improvement of Animals
307	Animal Management Systems

Outcome #2**1. Outcome Measures**

Number of persons that adopted one or more practices to control heat stress.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	55

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done**Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
305	Animal Physiological Processes
307	Animal Management Systems
306	Environmental Stress in Animals

Outcome #3**1. Outcome Measures**

Number of persons that improved the quality of their product.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	30	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
306	Environmental Stress in Animals
301	Reproductive Performance of Animals
305	Animal Physiological Processes
302	Nutrient Utilization in Animals
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)

Outcome #4**1. Outcome Measures**

Numbers of persons that improved the animal reproduction practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	65

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
305	Animal Physiological Processes
306	Environmental Stress in Animals
307	Animal Management Systems
301	Reproductive Performance of Animals

Outcome #5**1. Outcome Measures**

Number of persons that improved the nutrient utilization practices in animals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	75	150

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)
306	Environmental Stress in Animals
302	Nutrient Utilization in Animals

Outcome #6**1. Outcome Measures**

Number of persons that increased animal production after adopting the recommended practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	100	125

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
305	Animal Physiological Processes
307	Animal Management Systems
301	Reproductive Performance of Animals
306	Environmental Stress in Animals
302	Nutrient Utilization in Animals
308	Improved Animal Products (Before Harvest)

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

During the last year the feed commodities price had a dramatic increase due to the US policy to use corn for ethanol production, which have increased the cost of animal production. Due to budget limitations, the local government decreased the money allocated for animal enterprises, which resulted in a reduction in agricultural incentives.

V(l). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

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Evaluation Results

Key Items of Evaluation