

ACME Team Agriculture Inc.

Promotores Agrícolas

SECTION I: Statement of Need

Target Community Area and General Puerto Rico Information:

Puerto Rico (PR) has a current total population of 3,676, 221 that reside in 78 *municipios* (counties). Approximately one-half reside in the San Juan metro area, the balance in approximately 70 *municipios*. PR has been experiencing a growing financial crisis in the last few years. In 2015 this situation led to a literal bankrupt government. Lack of work has fueled a phenomenal out migration to the U.S. In 2013-2015, within two-years, 3.5% or 130,000 of the entire population has fled to the U.S¹. Similar exodus is projected for 2016.

Target catchment area.

The catchment area consists of 2 contiguous *municipios*, Arroyo and Guayama (see map). Located on the southeast coast, the area is largely rural with topography characterized by its Caribbean Sea coastline and mountains. Public transportation in the target area is limited to erratic schedule passenger van service with limited stops. There are no buses or any other form of public transportation.

Agriculture Production, Farms, Home Gardens and Farmers Markets

A whopping 80% of all food consumed in PR is imported; only 20% is locally grown². Macro-level trade restrictions related to PR's status as a U.S. Territory accounts for this disparate import gap. Arroyo ranks last of all 78 *municipios* in agricultural production³. Decline in the number of farms throughout PR has been endemic; in Arroyo there was a 25% loss of farms between 2000 and 2010⁴

In PR, home gardens are a rarity. In the general population, and especially among youth, there is a cultural aversion to physically working the soil. A vast majority of youth does not know how to grow a plant and enjoy the fruit of their labor. Though public schools are required to provide some agricultural education, in practice actual delivery is minimal or sketchy. There is no organized, programmatic effort to institutionalize on-hands agricultural trades in public schools. Organic farming throughout PR is the exception and the use of chemicals on farms is the norm.

¹ United States Department of Census, 2015

² United States Department of Agriculture (USDA) region 7

³ United States Department of Agriculture (USDA) region 7

⁴ United States Department of Agriculture (USDA) region 7

Government sponsored farmers markets are held in the *municipios* 4-5 times a year. No other farmers markets are held in the project target area.



1. Municipios de Puerto Rico.

Demographics of Target Population

Nearly 100% of this area's residents are mono-lingual, Spanish-speaking Puerto Rican Hispanics. The population of Arroyo is 19,575, including 3,221 students attending six K-8 schools and one high school. The total population of Guayama is 45,362, including 6,906 students attending eighteen K-8 schools and four high schools⁵.

Forty six percent (46%) of Puerto Rico's population live below the federal poverty index, three times higher than the US national average. The target community area is severely economically depressed. Unemployment in Guayama is a staggering 25%. Based on federal low-income eligibility, 100 % percent of the target high school student population receives federally funded free meals.

Community Participatory Planning Local Needs Assessment.

The proposed program engages in community participatory planning. On August 26th 2016, to gauge local public interest for youth-engaged agriculture programs and organic gardens, ACME Inc. administered a survey. Held at a free Health Screening Clinic, in Arroyo, a total of 22 participants completed the quantitative survey.

Summary finding of the survey revealed unequivocal interest and support for youth-engaged agriculture, organic gardens and related activities.

100% of the respondents agreed that:

⁵ PublicschoolsK12.com / Welcometopuertorico.com / Puerto Rico Department of Education, 2015(??)

- Home agricultural programs for community residents are lacking.
- Both Arroyo and Guayama are in need of a Agricultural Youth Program.
- Youth needs an agriculture program in Arroyo and Guayama that will mentor them for a brighter future.
- They prefer consumption of locally grown organic fruits and vegetables versus products sold at their local supermarket.
- They cannot afford to purchase organic fruits and vegetables due to the high market prices of these products.
- They would welcome orientation on safe growing methods and avoidance of chemical usage.
- They would attend to workshops on learning how to grow organically.

SECTION II: Proposed Approach

Program Goals and Objectives

Goal 1. Combat local cultural aversion to agricultural labor by educating and training the target population in a variety of organic garden activities.

Objective 1. Youth participants will attend a series of motivational instructional classes, workshops and practicum's taught by expert organic farming practitioners

Objective 2. Youth participants and community residents will learn the theory, science and practice of organic farming,

Objective 3. Youth participants, at its project farm, will engage in actual cultivation, maintenance, and harvest of its produce.

Goal 2. Educate and motivate the community to create and maintain chemically free home organic gardens.

Objective 1. Develop a Cadre of 12 *Promotores Agrícolas* (Agriculture Promoters) that will educate and stimulating interest in chemical-free organic agriculture.

Objective 2. *Promotores Agrícolas* will conduct local agriculture research to assess soil quality, water drainage, rain water collection, and fertilizer/chemical usage.

Objective 3 - Using science based strategies, *Promotores Agrícolas* will teach organic farming principles to community residents who will plant home gardens.

Goal 3. Create a public venue for the sale of affordable organically grown produce.

Objective 1. Youth participants will develop a business plan for the creation of a local Farmers Market.

Objective 2. Youth participants will harvest its project farm produce.

Objective 3. Youth participants will engage in the actual sale of its produce at its Farmers Market.

SECTION III. Participants, Activities, Timeline, Advisory Board

Program Participants and Recruitment.

Participation will be open to all males and females, ages 13-19, regardless of sexual orientation, disabilities, religious beliefs or political affiliations. Program applicants will focus on Arroyo and Guayama high school students. They will be recruited and screened by HS personnel with final selection made with project staff. Selection criterion consists of student interest, motivation and satisfactory school performance.

Project Activities.

The proposed project consists of three inter-related youth programs.

- A. Annual *Promotores Agrícolas*
- B. Summer *Promotores Agrícolas*
- C. Farmers Market

Annual *Promotores Agrícolas* Youth Program

Twelve (12) youth from Arroyo's Natividad Rodriguez Gonzalez HS in year-round activities consisting of:

1. Being educated on organic farming methods by professional agronomist(s).
2. Mentored by a seasoned local organic farmer in actual cultivation practices.
3. Conducting local research assessment including: soil composition, water drainage, irrigation practices, fertilizer usage and rainwater harvesting..

Local Research and Public Workshops

Upon completion of the professionally taught education phase the *Promotores Agrícolas* will perform research on local agriculture conditions. Investigative tools include using USDA strategic guidelines, organic farming literature and local data findings. Each *Promotor* will engage in different investigation topics. With agronomist support and supervision, the *Promotores Agrícolas* will collectively develop a basic organic garden curricula unit for public workshop presentations..

This process intends to develop their interest in agriculture careers and create role models for the community to emulate.

To motivate and guide home gardening efforts, *Promotores Agrícolas* will provide eight (8) organic farming workshops to target community residents. Participants will also receive informational pamphlets and sample seeds for establishing their own garden. Community outreach to attend these workshops focuses on immediate and extended family units. Workshops will be supervised by project staff and held in highly accessible local community centers. Given this strategy the program expects to attract 4-7 familial households totaling 20-25 participants per workshop. At this rate eight (8) workshops x 25 participants = 200 workshop attendees..

Develop Home Gardens

Promotores Agrícolas will also assist workshop participants in establishing home garden start-up, monitoring of home garden progress, encouraging maintenance, and ensuring overall safety practices. The *Promotores* will perform two (2) weekly status visits to two (2) households which will be served using a list of interested residents.

With staff support and guidance, the *Promotores Agrícolas* will literally demonstrate science-based methods to home garden participants. It will consist of sustainable organic agricultural gardening practices, the building of raised beds and the avoidance of chemical fertilizers, insecticides and pesticides.

Youth Participant Schedule

The Annual *Promotores Agrícolas* will work 46 weeks, 20 hours per week:
Monday-Friday 3:00-pm to 6:00pm, Saturdays, 9:00 am to 1:00pm..

Tasks by hours on a weekly basis:

Conduct Local Research - eight (8) hours (first 2 months),

Deliver Workshops - six (6) hours

Home Garden site visits four (4) hours

Farm work – two (2) hours.

Schedule adjusts seasonal needs such as harvesting and farmers market.

B. Summer *Promotores Agrícolas* Youth Program

Consists of twelve (12) youth selected from the Natividad Rodriguez Gonzalez High School and the Academia San Antonio of Guayama, Puerto Rico which is a private school. The reason that we are including private school project eligibility is to offer the same opportunities to all.

Organic Farmer and Project Farm

This program engages a local resident organic farmer and a rented 1 acre farm with water access. The farm is located in the target area and reasonably accessible to

youth participants and the community at large. The major activity of this program is the organic cultivation and harvesting of high-quality produce for pre-identified buyers and a weekly farmers market. Crops that the project will grow include: tomatoes, lettuce, cucumbers, okra, peppers, yams, corn, bananas, plantains.

The Farmer will serve as a organic farm mentor to project youth. The Farmer will instruct, train and demonstrate to project youth science-based organic agricultural techniques, from soil/water preparation to harvesting. He/she will supervise project youth and ensure their safety during all project farm activities. The Farmer will develop and maintaining a positive relationship with the *Promotores*.

The farmer will also be creating and maintaining a database of all project farm activities. This includes harvest yields by crop and farmers markets sales. He/she will adhere to USDA organic guidelines with the goal of obtaining USDA organic farm certification. He/she will design, plan and implement an irrigation system that will be cost effective, purchasing the parts and equipment necessary within the budget. The farmer will make raised beds according to project plans, for select seeds, and transplanting from our greenhouse.

Transportation

Youth participants will be transported to the farm in a project passenger van. Pickup and drop off site will be the Natividad Rodriguez Gonzalez High School. That HS will provide security personnel support to supervise safety.

Under Staff guidance, youth participants will:

- Attend Organic farming instruction taught by professional organic agronomists.
- They will learn and practice on-site natural composting methods.
- They will learn the dangers of chemical fertilizers, insecticides and pesticides
- Maintaining the cultivated areas clear of weeds, damaging insects and/or predators that may adversely affect the plants.
- They will harvest the product obtained, and distribute it to different locations that we will mention further down the line.
- These youth will also provide assistance to the students of the Annual Youth Program (*Promotores Agricolas*) in helping them perform their labors as they learn the safety of organic agriculture as well.

Farmer's Market

The proposed project will produce a good amount of fruits and vegetables harvested during the summer and early fall periods to the communities that we will serve. A local

Farmer's Market will be developed and operated to sell project organic produce.

The ATA Farmer's Market, will be operated by all the *Promotores*, the same participants that planted, grew and harvested the products, these will also include the students of the Summer Youth Program. The Farmer's Market will be on site every Saturday from 9:00 a.m. to 3:00 p.m.

During the harvest season until early Fall, the farmers market will operate on a weekly basis, every Saturday; alternating locations every week. In other words, one week we will present the farmers market in Guayama, Puerto Rico at a local community center and the following week, we will take the Farmers Market to a community center in Arroyo, Puerto Rico.

Advertising/Promotion

Via the following resources:

- Local Radio Station Public Service Announcements
- Local newspapers: *Periodico el Regional*, *Periodico la Esquina*
- Posting and distribution of leaflets and flyers.
- Community collaborators and stakeholders
- Project Advisory Board
- Local "word of mouth".

The prices of harvested produce goods will be sold at below market rate, in order to offer high quality organic vegetables and fruits at an affordable price. This allows residents to may purchase and enjoy this healthy produce, otherwise unaffordable to their low-income budgets..

Community members served at Farmers Market

The total number of community residents that will attend the Farmers Market and purchase project produce may vary from week to week. In year one of the program, 50 residents purchasing Farmers Market produce is projected (50 x 12 weeks = 600). Once the Farmers Market becomes better known, and produce is grown year-round, a significant exponential increase is anticipated.

SECTION IV. Community Collaboration

Stakeholders support the with identifiable and measurable roles.

- Municipality of Arroyo will provide an Administrative Assistant staff person and office cleaning services.
- Natividad Rodríguez González High School. Recruit, screen and recommend

Receipt of perishable goods and its use for breakfast and lunch meals.

- Mr. Armando Sanchez, Agronomist, United States Department of Agriculture, Puerto Rico. Patillas, PR office. Provide technical assistance with soil tilling, fabrication of raised beds and building a cost-effective irrigation system.
- *Asociación Recreativa de Yaurel* in Arroyo, Puerto Rico, they will provide the facilities for the presentation of the community workshops. *Fondos Federales CSBG- Acción Social de Puerto Rico* for the Elderly. Receipt of perishable goods and its use for the preparation of breakfast and lunch meals.

NOTE: Each community collaborator will be providing a signed Memorandum of Agreement that identifies their project role, specifies their project responsibilities and quantifies their support actions. This will be included when an actual application for grant/financial support is submitted to a funding agency.

Advisory Board: Membership, Function and Role

The Advisory Board is comprised of eight (8) individuals that will include representatives from the local schools, *municipios* government, youth serving agencies, agriculture agencies, and social service providers. Membership consists of: President, Vice-President, Treasurer and Secretary. Four individuals are Officials. The Board meets monthly, every 3rd Tuesday. The meeting location will alternate between the *municipios* of Arroyo and Guayama. Meetings will be properly documented and minutes will be duly noted by the Secretary.

The Board, with senior staff monitors the progress of the project and insures fiscal responsibility. Periodically, the entire staff will be invited to the Board meetings, to evaluate goals and objectives attainment and performance achievement. Board will review Reports from the Senior Manager and Program Evaluator. Their authority is limited to the supervision of the Budget. They will also assist in fundraising activities to help the project become self sustaining.

If any conflict of interest may occur, the Advisory Board has the duty to bring the issue to the table and resolve the situation at hand, with the assistance of the senior staff.

The Advisory Board serves on a volunteer basis. A stipend of \$40.00 is provided for their transportation expenses. A meal or refreshments are provided at the meetings.

SECTION V. Applicant Relevant Experience, Staff and Management

ACME Team Agriculture Inc. Background

ACME Team Agriculture INC. (ATA), Is a not-for-profit organization registered in the

Commonwealth of Puerto Rico since the year 2016 as a Department of Arroyo Consultants Mayagüez Education (ACME INC.) The organization was created to promote organic growing within local at risk communities that it serves.

ACME Accomplishments in Arroyo, PR

- August 26 2016. Free Public Health Fair. Provided no-cost screenings for: cholesterol, diabetes. high blood pressure and general eye/vision examinations. Zika virus prevention measures.
- May - July 2016. Rebuilt the fire damaged home for its single parent family. Recruited 27 volunteers, secured construction materials and coordinated the re-construction effort to its successful completion..
- March 2016. Donated a “position” bed to an 88 year old resident from out of pocket expenses.
- December 2015- donated 15 boxes of disposable diapers for 3 adult autistic patients.
- November 2015- Collected donations for pediatric cancer patients, San Juan Medical Center. At an Arroyo community event co-sponsored by the *Asociación Recreativa de Yaurel*, articles totaling \$790.00 were collected then distributed to needy Yaurel community residents.

Project Staff: Skills and Expertise

Senior Program Manager (full-time). We are counting on the expertise of our members that have been proven to successfully engage youth, community and assure delivery of quality services and attainment of goals and objectives. Management of all activities will be coordinated by staff in a organized, efficient manner. The proposed program builds upon a healthy and successful agricultural garden program that served similar low income at-risk youth in Boston, Massachusetts. Lessons learned from the Boston experience will be employed in this proposed project. The Coordinator of the Boston project, Mr. Carlos F. González will serve as the Senior program manager of this proposed program. Mr. Gonzalez is an experienced practitioner of youth-engaged agriculture programs and youth management. He is experienced in community and government liaison development. He is bilingual bicultural and engages in strategies that culturally inclusive. He is a native of Arroyo who resides there as well.

Mr Gonzalez engages in positive approaches to managing issues or situations that may occur with staff, the Advisory Board, parents and youth. He will build strong relationships with youth, parents, CBO's, schools and other youth serving entities. He will be responsible for the overseeing the entire proposed program He will ensure the realization of program goals and objectives. He will develop and implement real-time

project plans, using project management best practices to effectively plan, manage and control schedules, resources and budgets. He will produce timely reports to established and potential funders and the program's Advisory Board.

Agronomist (Consultant). The Agronomist will review the proper methods to ensure the safety of the crops, what organic elements will be used to fertilize the plants and which natural pesticides to use if needed. The will coordinate efforts with the Organic Head Farmer on related project matters. Every trimester, a report of these tests and work done on the soil and plants will be submitted by the Agronomist and Organic Farmer for review of ATA staff, Advisory Board and the Funding Partners.

Organic Farmer (full-time). Will instruct, train and demonstrate to project youth science-based organic agricultural techniques, from soil/water preparation to harvesting. The Organic Farmer will be responsible for the entire 1 acre project farm area, equipment and operation. He/she will adhere to USDA organic guidelines with the goal of obtaining USDA organic farm certification.

He/she will design, plan and implement an irrigation system, make raised beds according to project plans. The Farmer will create and maintain accurate a database of all project farm activities that includes harvest yields by crops and farmers markets sales. With the AYP and Summer Youth Coordinator will assign duties to project youth, including planting, composting weeding on the farm or for the farmer's market.

Annual Youth Program Coordinator (AYP) (full-time) Reports to the Senior Program Director and will also work with the Organic Farmer in assigning work tasks to the AYP participants on the project farm. He/she will be responsible for scheduling the activities of the AYP participants. He/she will assist/support the development of Organic Garden workshop curriculum with the project students. He/she will oversee the set up and dismantling of the (Saturday)farmers market.

The Coordinator will develop and maintain a database that measures a variety of participant and project activity indicators. He/she will also be driving the project passenger van, and transporting the youth to and from project activity sites.

The AYP Coordinator will establish strong relationships with parents, students, teachers, community leaders, local schools and other educational entities that can strengthen and bolster agriculture-related project activities. This includes:

Universidad Interamericana Guayama Campus, *Universidad Catolica* Guayama Campus, *Biblioteca Electronica*, Arroyo and Guayama, and USDA Puerto Rico offices.

Summer Youth Program Coordinator (summer season). Reports to the Senior Program Director. He/she will coordinate with the Organic Farmer in assigning work tasks to the SYP Participants on the project farm such as cultivating, weeding, composting and Farmers Market duties.

The SYP Coordinator supervises youth participants in they learn about organic agriculture, work cooperatively with other program youth and create an interest in advocating safe growing methods to their peers and neighbors. He/she develops and maintains a database regarding SYP participants and activities. He/she will also be driving the project passenger van, and transporting youth participants to/from project activities.

Administrative Assistant (part-time) The Administrative Assistant reports to the Senior Program Manager. She/he will be responsible for the handling of the in and outgoing calls from the ATA office in Arroyo. She will write down messages and relay them to the appropriate personnel. He/she will input all transactions in a data base. She/he will take minutes at meetings and wordprocess summary meeting notes. Must be fluent in Spanish and English. This is a part-time position which salary must document all transactions in a data base for future references.

Program Evaluator (part-time consultant).

Dr.

Antonio Delgado will serve as the program evaluator. Dr. Delgado holds a Ph.D in Urban Planning/Public Policy Analysis from the University of Illinois at Chicago. He also holds two Masters degrees: a Masters in Public Administration from the City University of New York and a Masters in Latin American History from the University of Texas at Austin. Dr. Delgado has over 20 years experience in the development, administration and evaluation of youth programs, after-school programs, substance abuse prevention and HIV/AIDS prevention.

His focus is on Latino populations, Limited English Proficient immigrants and rural populations. He is highly experienced in A minimum 10 years performing complex quantitative and qualitative evaluation of educational, public health, or after-school programs for at-risk youth. He is Bilingual/Bicultural and practices cultural inclusivity in all of his services. He has over 20 years experience in evaluating similar programs for a similar Latino youth participants. He has the proven ability and skills to draft comprehensive reports, executive summaries and any specific performance outcome measurement required by federally funded programs.

SECTION VI. Data Collection and Evaluation of Program Performance

A variety of evaluation tools will measure performance outcomes of project activities. This includes development of quantitative and qualitative surveys that are culturally inclusive of the target rural Puerto Rican population. The evaluation methodology

measures goals and objectives achievement and performance outcome achievement.

Major program components

1. Annual *Promotores Agrícolas*
2. Summer *Promotores Agrícolas*
3. Project Farm Activities
4. Project Farm Crop Yields
5. Home Garden Workshops
6. Home Garden Development
7. Farmers Market

Data will be collected every 3-6 months. Quarterly and Annual Reports with findings and recommendations will be written on completion of data review, interpretation, and analysis. Reports will include recommendations for program improvement. This strategy provides the mechanism for ongoing continuous program improvement of the project will be provided to project administration and the Advisory Board.

Pre and post surveys will be administered to youth participants to measure their knowledge of organic farming and level of interest in agricultural employment and/or careers. Customer satisfaction surveys will also be administered to participants of Home Garden Workshops and Home Garden

SECTION VII. Program Budget

Budget and Funding Request

The proposed program has an annual budget of \$281,111.

A total \$843,333 (\$281,111 x 3 years = \$843,333) funding is requested. This does not include a percentage (%) for Administrative Overhead expenses which will be negotiated at the time of funding approval.

The Program Budget is in on an *Excel* worksheet that is attached as a separate document.