El Pitirre Agro-Educational Project: 117 acres for sustainable development

Alejandro Acevedo
Cora Arce Rivera

March 19, 2020
Agenda:

- ASPIRA’s Background
- El Pitirre Agro-educational Project
- Farm Vision
- Intended Impact
- Farm Status
- Milestones
- Planting Areas
- Crop Plan
- Projections 2019-2025
- Current Partners
- Opportunities
- Closing remarks
ASPIRA’s Background

- Founded in 1969.

- Mission: Promote Puerto Rico’s transformation through the holistic development of the person and his/her environment.

- 3,400 low and moderate income persons/year.

- Main Focus: education, health, agriculture.
El Pitirre Agro-Educational Project

• Need addressed: Food insecurity; financial sustainability.

• Purpose: Support economic development by increasing food security and workforce.
  • Growing diversified crops.
  • Provide hands-on agricultural training.
  • Provide Agro-tourism activities.
Farm Vision

- **Agricultural use of land:**
  - Primary focus: Expand availability of products in the community by ASPIRA.
  - Renting land to small farmers

- **Agro-tourism:**
  - Bird watching (>30 species seen)
  - Pathway Hiking
  - Guided Tours
  - Conservation Areas
  - Camping and glamping

- **Educational Component:** Lab Farm (hands-on) for students of ASPIRA schools as well as 4H & FFA, and unemployed persons.
  - Planting
  - Harvesting
  - Plant and trees Identification
  - Farm Safety
  - Equipment Operation
Intended Impact

• Increase food security for LMI person and local small business.

• Increase the amount of LMI persons that receive agro-educational services.

• Retain and increase workforce of LMI.

• Increase awareness of environment protection and sustainable agriculture.
Farm Status

- 30 acres of the farm cleaned

Planting
- Pomegranate (80)
- Dragon Fruit (170)
- Tahiti Limes (300)
- Pineapple
- Passion Fruit
- Cilantro

Next planting: March-April:
- Coriander
Milestones

1. Equipment and employees were added to the farm:
   - Two field workers
   - F-150 pick up
   - RTV
   - Zero Turn Mower
   - Spraying tank

2. Electricity was installed in the house. (No service for several months due to hurricane Maria)

3. 100% of the roads accessing the farm cleaned.

4. Irrigation:
   - Pumping test to determine water volume
   - Water quality assessment
   - Water Well Permit requested
   - Construction of:
     - Water tank
     - Distribution system
   - To finish installation of: Pump & Solar panels
Milestones

5. Partnerships/Collaborations
   - DRNA
   - NRCS
   - Agriculture Extension Service
   - Dept. Agriculture
   - Cabo Rojo Governmental Municipality
   - Alelí Foundation
   - Foundation for PR
   - Path Stone
   - Boys Scouts
   - University of PR


7. Tree Green houses were constructed
Milestones

8. Agroecology classes using the farm as laboratory:
   • Two elective courses completed (30 to 45 hours/semester)
   • 30 students
   • Currently: 14 students

9. Fencing of neighboring areas through the farm.

10. Educational signs were installed identifying native trees though the trails.

11. Rainwater collection system was constructed.

12. Compost Pit for farm use was constructed.

13. Bird Watching Catalog (donated by Ornithology Society)
1. 7.22 acres available, divided in 5 different fields.
   - Field A (Front of the house): 2.37 acres
   - Field B (Back of the house): 2.82 acres
   - Field C:
     - Saman Valley #1: 0.33 acres
     - Saman Valley #2: 0.65 acres
   - Field D: Loma del tamarindo: 0.8 acres
   - Field E: (Between Well & Tamarind Hill): 0.25 acres
2. Greenhouses (3) – beside the house
Planting Areas Phase 1

Field A  2.37
Field B  2.82
Field C  0.65
Field D  0.80
Field E  0.33
Roads Cleaned
Crop Plan (Phase 1)

1. **Field A: (2.37 acres)**
   - **Yautia: (.5 acre)**
     - Lower area were the soil is deep.
   - **Plantain: (1 acre)**
     - Middle areas
   - **Squash: (.5 acre)**
     - Top area were soil is not very deep. (Left from Bamboos)
   - **Pitahaya: (.37 acre)**
     - Top area were soil is not very deep. (Right from Bamboos)

2. **Field B: (2.82 acres)**
   - Avocado
   - Tahiti Limes
   - Papaya
     - Between threes

3. **Field C: (1 acre)**
   - Tahiti Limes
   - Sweet potato
     - Between threes

4. **Greenhouses (3)**
   - Recao (coriander) and other herbs
Crop Plan (Phase 1)

1. Existing crops in the farm: Quenepa and Tamarind.
2. Plan: use these adult trees and start harvesting in order to sell the product and make profit.
3. Next steps:
   - Identify how many accessible threes we have.
   - Create paths to access them for future harvest.
   - In some cases we would need to trim. (Encourage Growth)
4. Continue scouting the farm for other crops. (Such as achiote)
Current Funding Partners

- Center for Disaster Philanthropy ($300,000)
- Dept. of Agriculture ($48,000)
- Alelí Foundation ($5,000)
- ASPIRA general fund ($540,094)
- Fundación BPPR ($40,000)
Opportunities: Funding needs

1. Phase 1: Investment funds ($302,876)
2. Phase 2: Expand planting area
   1. Adding Green houses
   2. Adding new fields
   3. Expansion of irrigation system
3. Adding agro-tourism services
   1. Camping and glamping tents
   2. Other installations
4. Leasing of heavy equipment: Bulldozer, etc.
5. Identification of Conservation in areas not suitable for agriculture: Lease to NRCS
Closing remarks

- **Vision:** To be a project that promotes sustainable development through agriculture & education.

- **Investment funds for 2020-2023 ($302,876)**

- **Next steps:** Expand planting area; Add agro-tourism services; Add renewable energy technology...
Before and after
Before and after
Educational Signs
Irrigation/ water system
Green Houses
THANK YOU!!