

Conservation Practices in Farms and Agroecological Projects in Puerto Rico

Agro. Paola I. Bonilla Carrero, MSc

Hispanic Access Foundation

Sustainable Agriculture or Agroecology

- The integration of multiple disciplines and schools of thought
- Honoring ancestral and *campesino* knowledge
- Considers the elements of the farm as a unit with dynamically connected parts
- Prioritizes **long-term economic viability, conservation, and social equity**
- Food security ≠ **food sovereignty**
- Works with nature, not against it



La Colmena Brava. Model Huerto as part of the Josco Bravo Educational Project. Isabela, P.R. 2023

Examples of conservations practices in agroecological farming

- Mimics natural ecosystems: more diverse and resilient systems
- Integrations of local plant varieties and cover crops
- Less external inputs
- Increases the use of organic matter
- Adequate and sustainable water management
- Reintegration of livestock
- Adaptation to shifting weather patterns

*Farms and
agroecological projects
in Puerto Rico*

Finca el Timón, Lares, P.R.

- Reintegration of livestock - native breed **India Criolla**
 - can withstand temperature and consume native grasses
 - Dual purpose breeds: more efficient
- Cattle ploughing while fertilizing the soil
- Animal husbandry aids in the composting process
- Grazing rotations
- Conscious tree clearing
- Silvopasture



Finca el Timon. Cattle ploughing with India Criolla. 2021. *Instagram*

Finca Plenitud, Las Marias, P.R.

- Educational non-profit project
- Permaculture focused
- Passive water management systems:
contour farming
- Terraces following an agroforestry approach
- Dissipate aggressive irrigation and protection
of topsoil
- Reduces runoff and flooding



plenitudpr. Maximizando el uso del agua. Instagram. 2023

Farms and USDA Conservation Programs

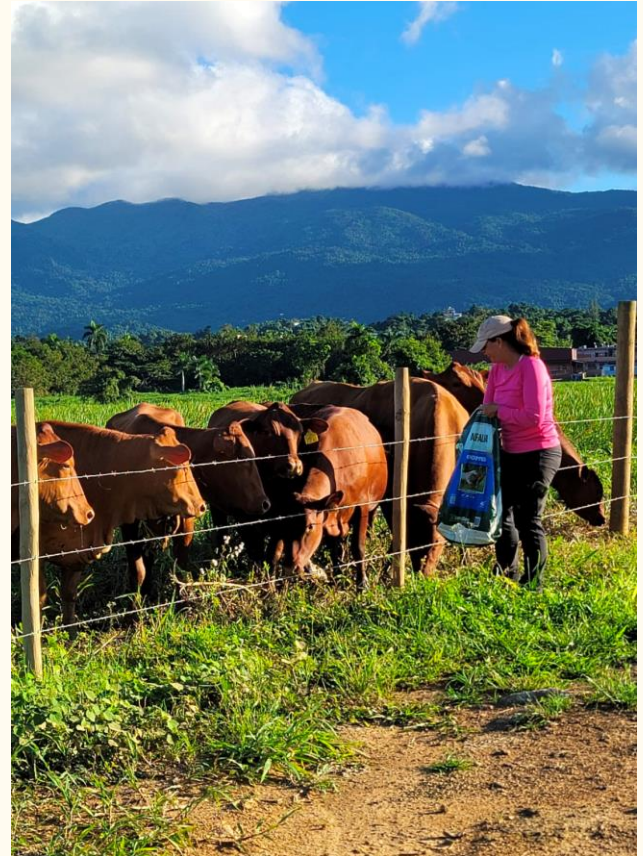
Las Finqueras, Corp., Río Grande, P.R.

- Puerto Rican agribusiness dedicated to raising beef cattle
- Founded by women
- High quality meat with consideration of animal well-being and natural resources

USDA-NRCS Conservation Programs:

- Tree-Shrub Site Preparation for shade
- Prescribed Grazing
- Forage and Biomass Planting to improve pastures the current one has low nutritional value and palatability

Among others



Senepol breed is tolerant to heat. Río Grande, P.R. 2023

Proyecto Agroecológico El Josco Bravo, Toa Alta, P.R.

- Agroecological education and farming project
- Crops, meat, and milk production and sustainable water management systems
- Agroecological promoters course over the last 10 years
- Produced over 21,000 lb of food in 2021



USDA NRCS Conservation Programs and Classification:

- Primer Farm Land (less than 5% of the world)
- High Tunnel Initiative
 - Impermeable structure
 - Protects from inclement weather
 - Offers stability to the crops
 - Allows crop varieties during different seasons

Valle de Bucarabones, Reserva Agroecológica, Río Grande, P.R.
Source: Facebook: Proyecto Agroecologico El Josco Bravo

Challenges in agroecological farming applicability

- Public policy
- Applicability in universities
- Distribution and marketing
- Consumption of processed food vs fresh food
- A need to promote seasonal consumption
- Subsidizing farmers

In Puerto Rico:

- Land Access
 - ◆ *Autoridad de Tierras*
 - ◆ Displacement and gentrification
- Austerity measures
 - ◆ Jones Act

- Conservation practices in farming include many different people and needs
- Producers and farmers need educational and technical assistance
- Make conservation programs more accessible to all type of farmers
- Prioritize small-scale regional production over mass production and importation

Agroecology is not an idea or a concept, it is an applicable and effective practice to feed our communities and protect our natural resources.