Background to EcoAgriCulture Project

• Northern Range Assessment (2005):
  • Agriculture, among other activities in the NR watersheds, contributing to the degradation of ecosystems there
  • Unsustainable land clearing practices
  • Farming on steep slopes without erosion prevention practices
  • Overuse of inorganic chemicals on farms
  • Affecting water quality and quantity (pollution, erosion and sedimentation)
  • Affecting biodiversity
  • Long-term sustainability of this type of farming is highly uncertain
Background to EcoAgriCulture Project

Options for managing unsustainable agriculture in the Northern Range (2005):

- Relocation of farmers out of the NR
  - Not feasible – disruption of lives and livelihoods
  - Not politically attractive

- Confining agriculture to flatter areas with medium-sized farms

- Strict soil conservation measures

- Incentives to institute soil conservation measures and to cultivate in a manner that is sustainable
EcoAgriCulture Project Overview

- February 2009, the Multilateral Investment Fund of the Inter-American Development Bank approved US $150,000 to fund a project for Implementation of Sustainable Farming Practices in Trinidad’s Northern Range Communities

- Goal: To promote alternative farming practices in two chosen watershed areas Maracas/ St. Joseph and Caura/ Tacarigua
  - Improve the returns to and sustainability of small-scale agriculture on the elevated slopes
  - Mitigate the negative impacts on the environment and affected downstream communities
EcoAgriCulture Project

Project Management
The Cropper Foundation

Oversight and Guidance
Steering Committee
- CARDI
- UWI
- SusTrust
- MFPLMA

Technical Guidance
Technical Coordinator
- Dr. Allan Williams

Technical Consultants
- Dr. Shango Alamu
- Beaumont Celestain
- Richard Guy
Main Project Activities

- Built on principles of participation and information sharing
- Activities were designed to facilitate collaborative learning and decision-making among stakeholders
Baseline Assessment

March – July 2010

Undertaken to better understand the farming conditions in the two target areas.

Focus on:

• Farming Activities
• Farming Practices
• Community Organizational Assets
• Livelihood prospects
• Important landscape features
First Stakeholder’s Workshop

- November, 2010
- Objectives:
  - Introduce the project details to stakeholders
  - Present findings of the baseline study
  - Present key aspects of the Project’s options
  - Provide a forum collective feedback
  - Solicit support and participation of stakeholders – Priority setting exercise

Responses to options generally positive – within options for individual farmers hesitancy shown wrt:
- Setting up demonstration plots on selected Farmers’ plots
- Private farmer investments in hillside stabilization
- Promoting indigenous species
Design of Intervention Model

- May, 2010 – January 2011
- Designed as a prerequisite for the development of intervention strategies for the target areas
- Model comprises:
  - Building appropriate governance structures
  - Training and empowerment
  - On-farm participatory research
  - Review and analysis
  - Testing and application of research findings among a broad mass of practitioners
  - Promotion to enhance broader adaptation
Selection of Participating Farmers

• January 2011
• How?

Established Criteria

• Farmer indicates a high level of interest and willingness to participate in the project
• Farmer indicates a high level of interest or willingness to share his or her newly acquired knowledge with others
• Farmer indicates a fairly strong commitment to continue with proposed farming methods beyond end of project
Selection of Participating Farmers

• January 2011
• How?

Benefit package developed out of understanding farmer’s needs, and support needed by farmers for transitioning to sustainable farming practices

- Information on better farming practices
- Learning to manage your farm and the environment around you
- Learning techniques on reducing farm input cost whilst increasing productivity
- Trying new technologies on your farms
- An opportunity to use part of your farm as a demonstration plot
Selection of Participating Farmers

18/ 38 interviewed in the Maracas/St. Joseph Area

16/ 28 interviewed in the Caura/ Tacarigua Watershed Area
Second Stakeholders Workshop

May 2011

Objectives:

• To introduce the concept of ‘Farming in a high nature value environment’ and how the HNVI works
• To demonstrate the background information that would support farmers in developing strategies for implementation of SFPs
• To provide an opportunity for farmers and other stakeholders to share ideas on strategies for implementation of SFPs
• To collectively determine the material support that would be made available to farmers engaged in readjusting their farming practices
High Nature Value Indexing

• April – May 2011

• Mechanism for incorporating environmental concerns (landscape scale) into the farmer’s assessment of personal risks, production security and perceived threats.

1. Promotes the idea that the areas in which we were operating were of High Nature Value and deserved special attention

2. Provides a relative determination of how eco-friendly a farmer’s practices are based on four variables: local pest and disease pressure; agronomic practices; fertilizing practices; and management of crop growth.
**High Nature Value Indexing**

- Index asks 8 questions relating to farm location, their land use and crop management practices and the types of inputs used, and scores based on responses.

<table>
<thead>
<tr>
<th>HNV Index Score</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 86</td>
<td>Your practices definitely have a strong ecological bent. Continue to follow your practices and share them with others</td>
</tr>
<tr>
<td>85-65</td>
<td>You are definitely on the way to a strong Eco-Friendly farming practice. Strengthen your practices by examining the weak points</td>
</tr>
<tr>
<td>Below 44</td>
<td>There may be some lessons that you can learn from nature itself. If you are interested in pursuing a more Eco-friendly farming practice, explore some of these alternatives</td>
</tr>
<tr>
<td></td>
<td>There may be a few “chemical” uses that are causing your index to tank. You can definitely improve your performance by changing both your inputs and also your approach to crop production</td>
</tr>
</tbody>
</table>
High Nature Value Indexing

- Low scores due to heavy use of NPK fertilizers
- Many ‘successful’ farmers found that HNV had recalibrated their apparent success as low scoring initiatives as resource appropriators
- Established framework for introducing corrective measures

HNV Index results for:

- 18 Farmers from Maracas/ St. Joseph
- 12 Farmers from Caura/ Tacarigua
EcoAgriCulture Project

On Farm Interventions

- Intervention Model
- High Nature Value Indexing
- Discussions with farmers

Baseline Assessment

On–Farm Interventions
On Farm Interventions

- July – December, 2011
- Technical Team convened to work on a one-on-one basis with farmers in the target areas to:
  - Determine their current status in terms of farming activities
  - Share the HNVI scores with farmers
  - Discuss their farming plans for the next 5-6 months
  - Offer the farmers information packages on a range of ecologically-friendly farming plans
  - Offer material inputs to aid in the transition to SFPs
On Farm Interventions

• Determine and implement specific action plans for incorporating SFPs
• Field monitoring and evaluation of participating farmers
Caura Valley Intervention

- Of eight (8) farmers engaged in this part of the project:
  - Six (6) showed strong interest in good ecological farming practices
  - Six (6) used some degree of on-farm generated inputs
  - All eight (8) farmers use ecologically friendly external farm inputs, e.g., cured pen manure
  - All eight (8) farmers indicated use of non-ecologically friendly farm inputs to varying degrees
  - Majority of farmers willing to reduce use of inorganic farm inputs
  - All eight (8) farmers had soils tested by MFPLMA
Project Performance

• Objective – 20% or more of farmers in the two farming communities implementing sustainable farming practices

• At the end of project

56% of farmers in Caura/ Tacarigua implementing SFPs
67% of farmers in Maracas/ St. Joseph implementing SFPs
Project Performance

Main Challenges

1. Identifying all farmers
   1. Farming in area but not living there
   2. Not everyone who farms identifies as a farmer
   3. Mismatch between farmers identified by Farmers Organisations and by MFPLMA

2. Delays in project execution
   1. Baseline Assessment had to be extended by 2 months due to delays – extensive dry season, widespread forest fires, National elections in 2010
   2. Design of Intervention Model had to be extended by six months to adequately capture information and further time needed to interact with farmers
Conclusion

• Project objectives met, but significant work still needs to be done towards mainstreaming SFPs
• Intervention set the stage for future work with farmers in adopting SFPs
• Sustainability?
EcoAgriCulture Project

Photo Credits
• Dr. Shango Alamu
• Dr. Allan Williams
• Mr. Beaumont Celestain
• Mr. Richard Guy
• The Cropper Foundation
• Nick Hogard
• Attorneymarketing.com
Thank You.

Questions?