UF/IFAS Extension
The Journey to Sustainability Begins with Education

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“Sustainable Agriculture”

“An Introduction to Its Concepts, Opportunities, and the USDA SARE Program

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Sustainable Agriculture Presentation Outline

• Sarasota Agriculture Policy Review
  – Vision statement
  – Conceptual foundation
• Sustainable Agriculture
  – Concepts
  – History
  – Models
• Policy Opportunities
• Summary
Sarasota Agriculture Policy Council
Vision Statement

- Small and large-scale agriculture are important components of the distinctive character of Sarasota County’s natural settings and heritage, and their roles are acknowledged in the Apoxsee.

- The residents of Sarasota County foresee a sustainable agriculture that is capable of meeting the needs of the current generation of farmers while leaving equal or better opportunities for their future generations and for new farmers.
• Sustainable agriculture provides economically profitable, environmentally sound and socially responsible opportunities that will reduce the ecological footprint of Sarasota County.

• To this end, agricultural policies are to be enacted to support sustainable agriculture and community food system development, and for farmland protection.
Sarasota County Comp Plan
Agriculture Policy

• Future Land Use Chapter
  Policy 1.3.3
• The county will support the implementation of a sustainable agriculture program
• to promote sustainable agriculture practices on private and publicly owned lands.
Sarasota County Comp Plan
Agriculture Policy

• Future Land Use Chapter
  Policy 1.3.3

• The program may include but shall not be limited to the following:
  – Provisions for community gardens and farms, as well as farmers markets, on county parks . . . and coordination with neighborhood planning
  – Incentive-based programs for agricultural lands in all areas that use sustainable farming practices
Sarasota County Comp Plan
Agriculture Policy

- Environment Chapter
  Policy 4.7.8
- The County shall support the implementation of Best Management Practices, as provided by the Sustainable Agriculture Programs of the state and USDA for local agriculture . . .
Sarasota County Comp Plan
Agriculture Policy

- Environment Chapter Policy 4.7.9
- Encourage and support the development and adoption of sustainable farming practices in order to:
Sarasota County Comp Plan
Agriculture Policy Amendments

• Promote utilization of agricultural commodities and technologies that are better adapted to local growing conditions and less demanding of water resources
• Promote environmental enhancement on all farms and ranches to provide connectivity with adjacent conservation lands
• Promote establishment of wildlife habitat on agricultural lands that will contribute to habitat corridors and ecosystem functions
Sustainable Agriculture

• Where Are Science-Based Sources of Information & Resources?
  – USDA
  – University of Florida/IFAS
  – Florida A&M University
  – Florida Atlantic University
• Sustainable Agriculture Research and Education Program (SARE)
  – Regional and State Offices
  – Sustainable Ag Network of Experts
  – Publications
  – Grants
  – National Continuing Education Program in Sustainable Agriculture
  – Website http://www.sare.org/
Alternative Technology Transfer to Rural Areas (ATTRA)

- Publications
- Free expert information service
- Education
- Website http://www.attra.org/
Short History of USDA Programs in Sustainable Agriculture

- 1991 – USDA/SARE Program created (i.e., renaming of the Agriculture In Concert with Environment (ACE) Program
- 1990 – Farm Bill
  - Sustainable agriculture definition formalized
  - USDA/National Organic Program (NOP) authorized
Short History of USDA Programs in Sustainable Agriculture

- 1988 – USDA/Low-Input Sustainable Agriculture (LISA) Program initiated
- 1987 – USDA/National Sustainable Agriculture Information Service (ATTRA) begun
- 1985 – USDA/Alternative Farming Systems Information Center, National Agriculture Library, formed
- 1980 – USDA “Report and Recommendations on Organic Farming” released
What’s the relationship between sustainable and organic agriculture?

- Sustainable agriculture guidelines are administered by USDA/SARE – i.e., a research & education focus
- Organic agriculture guidelines are administered by USDA/Marketing Service – i.e., one market label for foods grown using sustainable agriculture practices
University of Florida

- Center for Organic Agriculture
  - Research, teaching, extension
- Horticultural Sciences Department
  - Organic Farming Degree Program
- Small Farm & Alternative Enterprise Program
- School of Natural Resources & Education
  - McArthur Agro-Ecology Program at Buck Island
Example Additional FL Programs in Sustainable Agriculture

• Florida A&M University
  – Marketing & Small Farmer Outreach Program
    • Extension, research, teaching

• Florida Atlantic University
  – Agroecology Program
    • Multi-disciplinary & agency research projects
Example Additional National Programs in Sustainable Agriculture

• Sustainable Agriculture Working Group (SAWG)
  – Regional
  – Grass-roots coalitions
  – Educational

• National Campaign for Sustainable Agriculture
  – Policy education
  – Grass-roots coalition

http://www.sustainableagriculture.net/site/PageServer?pagename=NCSA_Home
• What is Sustainable Agriculture?

• How is it different than conventional agriculture?
Sustainable Agriculture
1990 Farm Bill Definition

• Satisfy human food and fiber needs
• Enhance environmental quality and the natural resource base
• Efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls
• Sustain the economic viability of farm operations
• Enhance the quality of life for farmers and society as a whole."
Sustainable Agriculture

- Response to Conventional Agriculture Issues

- Response to Farmland Losses

- Response Initially from Small Farmers, Rural Communities, Environmentalists, and Agriculture Ecology & Rural Scientists.
Conventional Agriculture Issues

- Industrial Approach
- Monoculture Specialization
- High External Inputs & Exports
- Environmental & Health Costs
- Market Centralization
- Loss of Family Farms and Rural Communities
- Corporate Farming
What is Sustainable Agriculture?

• Recognition of the whole systems nature of food, feed, & fiber production

• Balancing concerns of
  – environmental soundness
  – social equity
  – economic viability

• Functional interactions between agroecological & social/economic systems

Sustainable Agriculture

Example Economic Goals

• Reduce Production Costs
• Diversify Farming Enterprises
• Strengthen Local Economy
## 2002 Sarasota Agriculture Economic Value and Potential

<table>
<thead>
<tr>
<th></th>
<th>$ Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumed Food Total Value</strong></td>
<td>815.8</td>
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<tr>
<td><strong>Categories:</strong></td>
<td></td>
</tr>
<tr>
<td>Home consumed food</td>
<td>458.7</td>
</tr>
<tr>
<td>Away from home consumed food</td>
<td>351.5</td>
</tr>
<tr>
<td>Out of town consumed food</td>
<td>5.6</td>
</tr>
</tbody>
</table>

| **Agriculture Total Market Value** | 17.8      |
| **Categories:**                  |          |
| Floriculture                      | 8.3      |
| Fruits                            | 4.9      |
| Cattle/calves                     | 3.6      |
| Misc small livestock              | 1.0      |
| Vegetables                        | N/R      |

- Large potential for local food economic development

Data provided by Ken Meter of Crossroads Resource Center; & by FL Farm Bureau
Sustainable Agriculture
Example Environmental Goals

- Conserve Natural Resources
- Prevent Pollution
- Preserve Biodiversity
- Manage functional agricultural ecosystems
Sustainable Agriculture

Example Social Goals

- Preserve Family Farms and Agricultural Heritage
- Improve Farm Laborer Conditions
- Strengthen Community Food Systems
- Produce Wholesome Foods
Sustainable Agriculture
Example Concepts

• Stewardship of Both Natural and Human Resources
• Systems Perspective
• Interdisciplinary Efforts in Research and Education
• Making the Transition to Sustainable Agriculture Is a Process
• Achieving the Goals of Sustainable Agriculture Goal Are the Responsibility of All Participants in the Local Food System
Sustainable Agriculture
Steps to Achievement of Goals

• Develop Local Markets & Food Systems
• Protect Your Profits; Value-Added Products
• Build a Healthy Soil
• Protect Water Quality On and Beyond the Farm
• Manage Pest Ecologically; Use Minimal Pesticides
• Maximize Biodiversity on the Farm
• Protect Farmland
Sustainable Agriculture Example Models

- Edible Landscaping & Gardening
- Community & School Gardens
- Small Rural & Urban Agriculture
- Community Supported Farms (CSA)
- Ecological-based and/or Organic Farms
Sustainable Agriculture
Urban CSA Farm Example

Direct Marketing

School Fieldtrips

Urban Setting

Biodiversity

Diversified, Organic Production

http://www.fairviewgardens.org/
Sustainable Agriculture
Integrated Farm Example

Agro-ecotourism

http://www.fiorelliwinery.com/

Winery

Ecological Vineyard Management
How Does a Community Support Sustainable Agriculture?

- Food and Agriculture Policy Council Approach
- Community Food System Assessment Approach
- Public/Private Initiatives Approach
Food and Agriculture Policy Council Approach

- Public/private collaboration of diverse food system stakeholders and state government agencies
- Democratic process of policy development and implementation
- Scale neutral, e.g., municipality to state level
- Initiated by government commission and/or grassroots groups

Community Food Security Coalition’s North American Food Policy Council
http://www.foodsecurity.org/FPC/
Sarasota Ag Policy Council

• Formed in 2005 to represent the diversity of the community food system of Sarasota County
• Provided recommendations for new agriculture policies in Comprehensive Plan of Sarasota County (see http://sarasota.extension.ufl.edu/AG/agpolicy.shtml)
• Development of implementation recommendations is currently underway
  – Incentives need to be identified, such as market-driven, profitable approaches (e.g., food purchase policy; property tax rebates, etc.)
  – Using expanded public participation and outreach
Community Food System Assessment Approach

- Examines a broad range of food issues and links to community goals
- Designed to inform and build support for practical action
- Planned & systematic process

- It’s an assets-based approach
- Focuses on a geographically defined place
- Involves collaboration of a diverse group of community members
- One of new agriculture policies of Sarasota Co.

Source: www.foodsecurity.org/CFAguide-whatscookin.pdf
Global Food Distribution (nonrenewable energy)

Food production (largely technological and removed from society)

“Agicultural Supplies”

“waste products”

Food Preparation and Consumption (fast and cheap)
Sustainable Agriculture System

- Sustainable Food Production
  - Integrated into Community
- Local Food Distribution Channels
- Compost and other products
- Food Preparation and Consumption
  - (Nutritious and Healthy)
Public Initiative Example

• Geraldson Community Farm (CSA), Bradenton, FL
  – Project of West Coast Florida RC&D
    • partnership with Manatee County
    • response to community assessment of local ag preservation and foods needs
  – Based on promoting
    • sustainable & organic agriculture
    • entrepreneurial local agriculture economic development
    • agriculture heritage preservation

http://fwcrcd.org/projects/geraldson.html
Private Initiative Example

- **Localecopia Project, Palm Beach County, FL**
  - Project of Breakers Hotel, West Palm Beach
    - corporate policy for local foods purchasing
    - committee structure, including local farmers
    - UF/IFAS Extension partnership
  - Based on promoting
    - local agriculture economic development
    - sustainability and conservation
    - renewable energy applications

http://www.localecopia.org/
Summary

• Sustainable Agriculture
  – Response to Agriculture Issues
  – Goals
    • Economic
    • Environmental
    • Social

• Sustainable Agriculture Programs
  – USDA/SARE and ATTRA
  – UF/IFAS

• Community Opportunities
  – Sarasota Ag Policy Council
  – Community Food System Assessment
  – Private/public initiatives